

COUNTY BOROUGH OF PRESTON.



# REPORT

OF THE

Medical Officer of Health

ON THE HEALTH OF THE BOROUGH  
FOR THE YEAR

1921.

---

PRESTON :  
R. SEED & SONS, GUILDHALL ST  
1922.



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## HEALTH COMMITTEE, 1921-1922.

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Chairman : MR. COUNCILLOR T. H. C. DERHAM, M.B., C.M.

Vice-Chairman : MR. COUNCILLOR R. DURHAM.

The MAYOR.

Alderman SIR HARRY CARTMELL.

Mr. Alderman HENRY CARTMELL.

Mr. Alderman J. C. HAMILTON.

Mr. Alderman J. ORMROD.

Mr. Councillor T. KING.

Mr. Councillor W. L. KNIGHT.

Mr. Councillor J. HUNT.

Mr. Councillor W. BIRTWISTLE.

Mr. Councillor H. FAZACKERLEY.

Mr. Councillor E. C. C. FIRTH.

Mr. Councillor T. SNELHAM.

Mr. Councillor W. H. FRANCIS.

Mr. Councillor J. HERBERT.

Mrs. Councillor W. H. PIMBLETT.

Mr. Councillor A. DIXON, M.R.C.S.,

L.R.C.P.

Mr. Councillor A. RAMSAY, M.B., C.M.

Mr. Councillor E. A. HEANEY.

## MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman : MR. COUNCILLOR DURHAM.

The Health Committee with the following Ladies adopted as Members :—

Mrs. ASTLEY-BELL.

Mrs. BARWICK.

Mrs. DUNBAR, J.P.

Mrs. MARSDEN, J.P.

Mrs. TODD, J.P.

Mrs. TREWBY.

Mrs. STANGER.

## TUBERCULOSIS SUB-COMMITTEE.

Members of the Health Committee, with the following Members of the Insurance Committee adopted as Members :—

MR. J. CORBISHLEY.

MR. W. PEMBERTON.

MR. R. SUTTON.

# Report of the Medical Officer of Health,

---

*To the Chairman and Members of the Health Committee,*

MRS. PIMBLETT AND GENTLEMEN,

I have the honour to submit to you the Report on the Sanitary Condition of the Borough for the year 1921.

The outstanding feature of the year has been the agreeable and long continued Summer which, with the exception of its effect upon the incidence of Summer Diarrhoea, has materially contributed to the health and happiness of the people.

The greatest adverse influence has been the continuance of trade depression with its consequent lack of and irregularity in employment. The usual effects of a period of bad trade, that is, insufficient food and clothing have been mitigated to a large extent by charitable funds, the Unemployment dole and the Poor Law.

The improvement in Vital Statistics, detailed in the body of the Report, has been maintained although the reservation that the rate of improvement in Preston has been exceeded in some of the other large Textile manufacturing towns must be made. The most prominent features are the high birth rate, the low death rate and the modest improvement in infantile mortality over pre-war years. The increase in the mortality from Cancer is an universal experience upon which at present no light can be thrown. In this connection it should be borne in mind that the great improvement in the public health which has been manifested in the last few decades, with the consequent improvement in the expectation of life of the average individual, has resulted in the survival of a much larger number of persons of a susceptible age. The improvement in the incidence of Tuberculosis and the mortality caused thereby has exceeded our hopes. There has been no difficulty in obtaining beds for Sanatorium treatment but the work at the "Chestnuts" for those more severely affected has been restricted by the limitation of its size.

With infectious diseases at a minimum the Isolation Hospital has not been fully occupied. Proposals for Hospital treatment of selected cases of Puerperal Fever, Infective Enteritis, Measles and Whooping Cough have been put before you; their acceptance would in epidemic times involve the simultaneous utilization of all the Wards at the Hospital, which, with the limited accommodation for staff in the administrative block would prove a difficult matter.



A matter to which I would specially direct your attention is the lack of a Home Nursing Service. In many towns this has been provided by voluntary efforts aided by grants from central funds and local authorities.

The details of the work performed by the District Sanitary Inspectors and the Special (Food and Port Sanitary) Inspectors are illustrative of the zeal with which they perform their duties. Their districts are too large especially No. 1, where the Holme Slack and Ribbleton Housing Schemes have added 500 houses to an already populous and extensive area. The Food Inspector has too much placed upon his shoulders especially in view of new government requirements and the duties placed upon him by the Preston Corporation Act, 1921. In view of the projected legislation on the lines of Lord Newton's Smoke Abatement Commission, which reported recently, it is probable that the administration of the Public Health Act as regards Smoke Nuisance will be radically altered; in the meantime the "permissible limit" of black smoke is too high and not enough observations are taken.

The efforts of the Maternity and Child Welfare Committee, nobly supported by the Ladies' Voluntary Workers' Association, are bearing good fruit. The recent venture of the Association in supplying Dental Treatment to mothers and young children is one which has rightly earned your sympathy and encouragement. The Preston Royal Infirmary have also broken new ground in opening a Maternity Ward which should prove very valuable. The comparatively large loss of life from Puerperal Fever is a serious matter deserving consideration. The re-organisation of the Venereal Diseases department has been effected as regards staff arrangements, but the provision of additional buildings, rendered possible by the generosity of Sir Charles Brown, is still the subject of negotiations.

The office accommodation for the department is poor. Sanitary and Clerical Staff is cramped, and the departments, Maternity and Child Welfare, Tuberculosis and School Medical Service are housed separately. This causes duplication of clerical and visiting staff and impairment of co-ordination.

In conclusion, I beg to tender my thanks to the Chairman and Members of your Committee for the ready support which I have received for the various proposals I have had the honour of submitting during the year.

I am,

Your obedient Servant,

F. A. SHARPE,  
Medical Officer of Health.



## 1.—Natural and Social Conditions of the District.

### VITAL STATISTICS.

Area in acres .....	3,964
Population, estimated middle of 1921 .....	119,900
Number of Inhabited Houses .....	27,541
Number of families or separate occupiers .....	unknown
Rateable Value .....	£585,637
Sum represented by a penny rate—Borough Rate.	£2,100
General District Rate.	£2,030

	Males.	Females.	Birth Rate.
Births—Legitimate .....	1,363	1,271	23.44
Illegitimate .....	77	100	
Deaths (nett)—1,595.	Death rate—13.30.		
Number of women dying in or in consequence of child birth—			
From Sepsis—7.	From other causes—8.		
Deaths of Infants under one year of age per 1,000 births—			
Legitimate—105.	Illegitimate—214.	Total—112.	
Deaths from Measles (all ages) .....			Nil.
,,      Whooping Cough (all ages) .....			29
,,      Diarrhoea (under two years) .....			56

The population of the Borough at the 1921 Census was 117,426, and the Registrar General's estimate for the year is 119,900. The nett deaths, 1,595, and the death rate 13.3 per 1,000, were lower than those of last year which were then the lowest on record.

The birth rate, 23.44, slightly lower than that of last year, still maintains its post war recovery to pre-war figures.

The natural increase was 1,216 persons, a decline of 200 compared with 1920, but a substantial increase over the figure for many previous years. The deaths of 316 infants gives an Infantile Mortality of 112 per 1,000 born and although lower than the average of preceding years is higher than that of the 96 Great Towns.

Among the 20 Great Towns in Lancashire and Cheshire, which are grouped together by the Registrar-General, Preston does not occupy a good comparative position as regards Vital Statistics.

9 Towns had a higher Birth Rate.	
5   ,,       ,,   Death Rate.	
5   ,,       ,,   Death Rate from Diarrhoea and Enteritis.	
2   ,,       ,,   Infantile Mortality.	

The Vital Statistics of the various Wards are set out in the table below. Ribbleton's figures are the best as there is an association of a high birth rate, 25.17, with a low death rate, 10.37, and a low infant mortality, 82. This Ward occupied a similar favourable position in 1920. Avenham, Moorbrook, Maudland and Fishwick Wards show a low death rate and a low infantile mortality, associated with a low birth rate, while Ashton has the lowest birth rate and is among the highest as regards infantile mortality. St. Peter's comes out comparatively well although the general death rate is high. An excessive infantile mortality is associated with a high birth rate in St. John's, Christ Church, Park and Trinity, while Deepdale has an average birth rate and death rate with a slight excess in infantile mortality.

The principal causes of death as revealed in Table Ic, p. 10, are Pulmonary Tuberculosis, Cancer, Organic Heart Disease, Bronchitis, and Pneumonia. The remarkable drop in the number of deaths from Tuberculosis, referred to in last year's report, has been continued and is dealt with more fully in the section of the Report relating to Tuberculosis. Suffice it to say that the rate per 1,000 living is now 0.69, as compared with 0.91 in 1920, and 1.17 in 1915. In 1920 Pulmonary Tuberculosis was the cause of 66 deaths out of every 1,000 deaths from all causes. In 1921 the proportion was 52. Deaths from other forms of Tuberculosis shew a similar reduction. There has been a reduction in the number of deaths caused by Organic Heart Disease (182 in 1920, 144 in 1921), by Bronchitis, 154 : 118; by Pneumonia 153 : 139; Cancer shews an increase 127 : 140; and Epidemic Diarrhoea a large increase 30 : 70, due to the abnormal Summer conditions.

TABLE IA.

WARD	Estimated Populatoin, June, 1921	Nett Deaths	Rate per 1000	Births	Rate per 1000	Deaths of Infants	Infant Mortality
St. John's ...	11890	176	14.80	296	24.89	45	152
Avenham ...	7259	93	12.81	130	17.90	9	69
Christ Christ ...	8656	114	13.17	229	26.46	29	127
Ashton ...	9116	115	12.61	144	15.79	18	125
Maudland ...	9832	113	11.49	213	21.66	17	80
St. Peter's ...	11721	178	15.19	289	24.66	30	104
Moorbrook ...	8917	102	11.44	172	19.29	14	81
Park ...	14789	206	13.86	417	28.19	53	127
Trinity ...	9892	159	16.07	285	28.81	39	137
Deepdale ...	10970	145	13.21	257	23.42	32	124
Ribbleton ...	9257	96	10.37	233	25.17	19	82
Fishwick ...	7602	98	12.89	146	19.20	11	75
	119,900	1595	13.30	2811	23.44	316	112

TABLE IB.

## Vital Statistics of whole District during 1921 and previous nine years.

YEAR.	Total Population.	BIRTHS. Nett.		CIVILIAN POPULA- TION.	TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Num- ber.	Rate.		Num- ber.	Rate.	of Non- resid'ts regis- tered in the district	of Resi- dents not regist'd in the district	Und'r 1 yr.of age		At all Ages.	
									Num- ber.	Rate per 1,000 Nett Births.	Num- ber	Rate.
1912	117,630	2753	23.40		1797	15.28	32	207	342	124	1972	16.76
1913	118,070	2888	23.93		1871	15.55	39	211	462	160	2043	16.98
1914	118,514	2841	23.97		1681	14.18	58	250	401	141	1873	15.80
1915	118,118	2546	21.48	111936	1878	16.78	50	258	395	155	2086	18.63
1916	119,611	2315	19.36	109935	1581	14.39	46	239	254	109	1774	16.14
1917	118,993	2019	16.96	106747	1461	13.69	57	241	255	124	1660	15.46
1918	118,595	1906	16.07	105845	1778	16.79	66	232	213	113	1944	18.36
1919	122,168	2086	17.45	117277	1619	13.55	66	207	225	110	1760	14.72
1920	122,133	2984	24.43	121950	1539	12.57	83	203	301	101	1659	13.60
1921	119,900	2811	23.44		1449	12.08	61	207	316	112	1595	13.30

Total population at all ages ..... 117,426  
 Number of inhabited houses ..... Not available  
 Area of District in acres (Land and Inland Water)..... } 3,964  
 Average number of persons per house. ,,

{  
 At Census  
 of 1921.



TABLE 1c.

## Causes of Death at Different Periods of Life during the year 1921.

CAUSES OF DEATH.	Sex	All Ages.	0—	1—	2—	5—	15—	25—	45—	65—	75—
ALL CAUSES .....	M	783	183	32	12	30	31	81	203	129	82
	F	812	133	36	11	24	28	86	210	160	124
1 Enteric Fever .....	M	...	...	...	...	...	...	...	...	...	...
	F	1	...	...	...	...	1	...	...	...	...
2 Small Pox .....	M	...	...	...	...	...	...	...	...	...	...
	F	...	...	...	...	...	...	...	...	...	...
3 Measles .....	M	...	...	...	...	...	...	...	...	...	...
	F	...	...	...	...	...	...	...	...	...	...
4 Scarlet Fever .....	M	2	...	...	...	2	...	...	...	...	...
	F	1	...	...	...	1	...	...	...	...	...
5 Whooping Cough .....	M	7	6	1	...	...	...	...	...	...	...
	F	22	13	8	1	...	...	...	...	...	...
6 Diphtheria .....	M	6	1	2	1	2	...	...	...	...	...
	F	7	1	1	3	2	...	...	...	...	...
7 Influenza .....	M	17	1	1	...	2	...	2	5	3	3
	F	15	...	...	...	...	2	4	4	5	...
8 Encephalitis Lethargica .....	M	...	...	...	...	...	...	...	...	...	...
	F	1	...	...	...	...	...	...	1	...	...
9 Meningococcal meningitis .....	M	...	...	...	...	...	...	...	...	...	...
	F	...	...	...	...	...	...	...	...	...	...
10 Tuberculosis of respiratory system .....	M	42	...	...	...	2	8	15	16	1	...
	F	42	...	...	...	1	7	16	13	4	1
11 Other tuberculous diseases .....	M	15	3	2	1	3	1	1	3	1	...
	F	15	4	1	1	5	1	2	1	...	...
12 Cancer, malignant disease .....	M	61	...	...	...	...	1	6	30	19	5
	F	79	...	...	...	1	...	12	38	20	8
13 Rheumatic Fever .....	M	6	...	...	...	1	...	1	2	2	...
	F	7	...	...	...	1	...	3	2	1	...
14 Diabetes .....	M	3	...	...	...	...	...	...	3	...	...
	F	11	...	...	...	...	...	...	10	...	1
15 Cerebral Hæmorrhage, &c. ....	M	43	...	...	...	...	...	...	17	21	5
	F	75	...	...	...	...	...	...	26	26	23
16 Heart Disease .....	M	64	...	...	...	3	1	8	25	19	8
	F	80	1	...	...	1	4	5	32	24	13
17 Arterio-sclerosis .....	M	23	...	...	...	...	...	...	9	6	8
	F	11	...	...	...	...	...	...	3	4	4
18 Bronchitis .....	M	58	15	4	1	2	...	1	13	13	9
	F	60	6	5	...	...	...	...	9	24	16
19 Pneumonia (all forms) .....	M	71	24	10	3	2	2	11	13	6	...
	F	68	15	12	5	3	1	7	9	13	3
20 Other respiratory diseases .....	M	8	1	1	...	...	1	1	3	1	...
	F	7	...	...	...	1	...	1	3	2	...
21 Ulcer of Stomach or Duodenum .....	M	4	...	...	...	...	1	1	1	1	...
	F	2	...	...	...	...	1	1	...	...	...
22 Diarrhœa, &c. ....	M	40	29	4	1	2	...	...	1	1	2
	F	30	21	2	...	1	1	1	3	1	...
23 Appendicitis and Typhlitis .....	M	2	...	...	...	...	1	...	1	...	...
	F	2	...	...	...	1	1	...	...	...	...
24 Cirrhosis of Liver .....	M	5	...	...	...	...	...	1	2	2	...
	F	1	...	...	...	...	...	1	...	...	...
25 Acute and Chronic Nephritis ...	M	21	1	...	...	1	2	4	7	4	2
	F	15	...	...	...	...	1	4	6	3	1
26 Puerperal Sepsis .....	M	...	...	...	...	...	...	...	...	...	...
	F	7	...	...	...	...	2	5	...	...	...
27 Other accidents and diseases of pregnancy and parturition .....	M	...	...	...	...	...	...	...	...	...	...
	F	8	...	...	...	1	...	7	...	...	...
28 Congenital Debility and Malformation, Premature Birth ....	M	73	73	...	...	...	...	...	...	...	...
	F	49	49	...	...	...	...	...	...	...	...
29 Suicide .....	M	6	...	...	...	...	1	2	2	1	...
	F	5	...	...	...	...	...	...	5	...	...
30 Other deaths from violence .....	M	25	1	1	2	4	5	4	6	2	...
	F	14	1	...	1	2	3	...	5	...	2
31 Other defined diseases .....	M	159	25	6	3	4	5	19	36	25	36
	F	157	20	4	...	3	1	14	32	32	51
32 Causes ill-defined or unknown...	M	22	3	...	...	...	2	4	8	1	4
	F	20	2	3	...	...	2	3	8	1	1



TABLE Ic.—(Continued).

## Number and Cause of Death in each Ward for the year.

CAUSE OF DEATH.	St. John's Ward.	Avenham Ward.	Christ Church Ward.	Ashton Ward.	Maudland Ward.	St. Peter's Ward.	Moor Brook Ward.	Park Ward.	Trinity Ward.	Deepdale Ward.	Ribbleton Ward.	Fishwick Ward.
1 Enteric Fever .....	...	...	...	...	...	1	...	...	...	...	...	...
2 Small Pox .....	...	...	...	...	...	...	...	...	...	...	...	...
3 Measles .....	...	...	...	...	...	...	...	...	...	...	...	...
4 Scarlet Fever .....	...	...	...	...	...	...	1	1	...	1	...	...
5 Whooping Cough .....	3	2	5	1	4	5	1	2	1	3	2	...
6 Diphtheria and Croup ....	...	...	2	1	1	2	...	2	1	4	...	...
7 Influenza .....	4	...	3	1	4	6	2	3	1	3	2	1
8 Encephalitis Lethargica ..	...	...	...	...	...	...	...	1	...	...	...	...
9 Meningococcal Meningitis ..	...	...	...	...	...	...	...	...	...	...	...	...
10 Phthisis (Pul. Tub.) .....	7	5	9	2	4	13	5	13	7	11	5	3
11 Other Tuber. Diseases ...	6	2	...	2	1	1	2	5	...	5	3	3
12 Cancer .....	12	8	12	11	17	13	15	15	9	10	7	7
13 Rheumatic Fever .....	1	...	1	2	1	...	1	2	3	...	...	...
14 Diabetes .....	...	2	...	2	1	2	...	1	2	2	...	1
15 Cerebral hæmorrhage .....	15	7	12	10	9	18	4	14	7	11	5	8
16 Organic Heart Disease ...	25	9	7	9	13	13	13	21	17	13	8	11
17 Arterio Sclerosis .....	1	1	1	5	3	2	4	1	2	3	4	3
18 Bronchitis .....	21	8	5	4	3	13	6	13	16	5	8	9
19 Pneumonia .....	7	12	4	8	10	20	6	20	16	16	6	10
20 Other Respiratory Dis. ...	2	...	1	2	1	1	1	1	...	...	1	...
21 Ulcer of Stomach and Duodenum .....	...	...	1	2	...	...	1	1	...	...	1	...
22 Diarrhœa .....	10	...	9	5	2	5	1	9	12	6	3	4
23 Appendicitis & Typhlitis..	...	...	...	1	1	...	...	...	2	...	...	...
24 Cirrhosis of Liver .....	...	...	...	2	...	...	1	...	1	1	1	...
25 Nephritis & Bright's Dis.	1	1	3	4	6	5	2	3	4	1	4	5
26 Puerperal Fever .....	1	...	...	1	...	1	...	2	...	1	...	...
27 Other Accidents and Dis- eases of Preg. & Part....	...	...	...	1	...	...	...	1	2	3	..	1
28 Congenital Debility and Malformation, Premature Birth .....	15	5	6	8	6	15	10	19	13	13	8	4
29 Suicide .....	2	...	...	1	2	2	...	1	1	...	1	1
30 Violent Deaths .....	5	1	7	4	1	2	2	3	6	1	3	5
31 Other Defined Diseases ..	36	23	22	23	22	26	21	51	35	29	23	18
32 Diseases Ill-defined or Unknown .....	2	7	4	3	1	12	3	1	1	3	1	4
Totals .....	176	93	114	115	113	178	102	206	159	145	96	98

TABLE ID.

Birth Rate, Death Rate, and Analysis of Mortality during the Year 1921.

(Provisional figures. Populations as enumerated in 1921 have been used for the purposes of this Table. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

This Table, with the exception of the line relating to the Borough, has been supplied by the Registrar-General:—

	BIRTH- RATE PER 1000	ANNUAL DEATH RATE PER 1,000 POPULATION								RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL DEATHS				
		All Causes	Enteric Fever	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years)	Total Deaths under One Year	Deaths in Public Institutions	Certified Causes of Death	Inquest Cases	Uncertified Causes of Death
England and Wales...	22.4	12.1	0.02	0.00	0.06	0.03	0.12	0.12	0.23	0.44	15.5	83	25.5	92.5	6.4	1.1
96 Great Towns, including London (1911 Census Populations exceeding 50,000)	23.3	12.3	0.01	0.00	0.08	0.04	0.13	0.15	0.23	0.40	19.3	87	33.2	92.5	6.8	0.7
148 Smaller Towns (1911 Census Popula- tions 20,000—50,000)	22.7	11.3	0.01	0.00	0.05	0.03	0.11	0.11	0.26	0.35	15.6	84	17.7	93.5	5.1	1.4
London ... ..	22.3	12.4	0.01	—	0.05	0.06	0.12	0.25	0.23	0.42	21.3	80	49.2	91.6	8.2	0.2
County Borough of Preston ... ..	23.44	13.30	0.008	0.00	0.00	0.02	0.24	0.11	0.26	0.41	19.9	112	18.4	91.4	4.26	3.8

TABLE 1E.

Abstract from the Registrar General's Report. Birth Rates, Death Rates  
and Infantile Mortality for the 52 weeks ended 31st December, 1921.

NAME OF TOWN.	Enumerated Civilian population June, 1921.	Birth Rate.	Re- corded Death Rate.	En- teric Fever.	Small Pox.	Meas- les.	Scarlet Fever.	Wh'p- ing Cough.	Diph- theria.	Diarr- hoea & Enter- itis under 2 years	Deaths under 1 year to 1,000 Births.
Stockport .....	123,315	20.8	12.0	0.01	0.00	0.00	0.04	0.05	0.14	14.2	89
Birkenhead .....	145,592	26.3	11.2	0.01	0.00	0.07	0.05	0.09	0.09	25.2	75
Wallasey .....	90,721	17.6	10.1	0.01	0.00	0.00	0.04	0.10	0.13	10.4	59
Liverpool .....	803,118	27.4	14.3	0.01	0.00	0.40	0.06	0.25	0.12	32.4	105
Bolton .....	178,678	21.4	12.9	0.01	0.00	0.02	0.04	0.14	0.11	13.8	96
Manchester .....	730,551	24.8	13.6	0.02	0.00	0.01	0.08	0.20	0.12	20.3	94
Salford .....	234,150	25.2	13.4	0.06	0.00	0.01	0.09	0.17	0.10	24.2	101
Oldham .....	145,001	21.7	14.6	0.02	0.00	0.02	0.06	0.24	0.05	12.6	105
<b>Preston .....</b>	<b>117,426</b>	<b>24.1</b>	<b>13.4</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>0.23</b>	<b>0.09</b>	<b>21.6</b>	<b>112</b>
Burnley .....	103,175	22.9	13.6	0.03	0.00	0.00	0.00	0.31	0.08	21.0	117
Blackburn .....	126,630	20.1	12.7	0.00	0.00	0.02	0.01	0.15	0.05	13.7	107
Bootle .....	76,508	28.1	12.1	0.00	0.00	0.18	0.07	0.21	0.18	24.3	84
St. Helens .....	102,675	29.2	12.6	0.00	0.00	0.07	0.05	0.22	0.05	15.2	105
Southport .....	76,644	14.7	11.7	0.03	0.00	0.03	0.00	0.06	0.06	8.9	68
Wigan .....	89,447	28.1	14.0	0.09	0.00	0.00	0.10	0.35	0.05	32.1	115
Warrington .....	76,811	26.5	12.1	0.02	0.00	0.04	0.00	0.40	0.07	20.4	94
Bury .....	56,426	19.7	12.9	0.00	0.00	0.12	0.03	0.00	0.10	14.5	84
Rochdale .....	90,807	19.1	13.2	0.01	0.00	0.12	0.03	0.01	0.03	10.9	88
Blackpool .....	99,640	11.5	8.8	0.01	0.00	0.01	0.01	0.06	0.07	2.6	65
Barrow-in-Furness.	74,254	24.3	11.5	0.02	0.00	0.38	0.01	0.01	0.05	7.7	83



## NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS IN THE DISTRICT.

NURSING.—There is no organisation for the provision of home nursing in the Borough. There are a few Nurses provided by religious bodies.

The lack of an adequate Home Nursing Service is one that should receive early consideration.

MIDWIVES.—It has not been found necessary to subsidise any midwives in the district. The subject is fully dealt with in the Maternity and Child Welfare Section.

### Clinics and Treatment Centres.

Name and Situation.	Nature of Accommodation.	By whom provided.
Tuberculosis Dispensary, North Road.	Ante-Natal Centre ...	Town Council.
Walker St. Centre, Weavers' Institute	Post-Natal Welfare Centre ...	" "
Fylde Road Centre, Primitive Methodist School .....	" " ...	" "
Manchester Road Centre, St. Saviour's Mission Room .....	" " ...	" "
Deepdale Mill Street Centre, Primitive Methodist School .....	" " ...	" "
Savoy Street Centre, Christ Church Mission Room .....	" " ...	" "
Miller Arcade .....	Minor Ailments treatment Centre and Dental Clinic ...	" "
Tuberculosis Dispensary, North Road.	The Treatment of Tuberculosis ...	" "
Venereal Diseases Clinic, at the Preston Royal Infirmary .....	The Treatment of Venereal Diseases ...	For the Town Council by the Preston Royal Infirmary.
Snow Hill Treatment Centre .....	Massage and Minor Ailments, Dental Defects for women & children under 5 ...	Preston Infant Welfare Voluntary Workers' Association.



**Hospitals.**

Provided or subsidised by the Council.

Name and Situation.	No. of Beds.	Nature of Accommodation.	By whom provided.
1. TUBERCULOSIS—			
(a) The “ Chestnuts ” Sanatorium, Ribbleton ...	16	Hospital for advanced cases of Tuberculosis.	Town Council.
(b) 30—40 beds in various Sanatoria as under :—			
Crossley Sanatorium, Delamere, Cheshire.	6	The Treatment of Pulmonary Tuberculosis	By the governing body for the Town Council.
Stanhope Sanatorium, County Durham ...	6	” ” ...	” ” ...
Bowden Sanatorium, Cheshire ...	8	” ” ...	” ” ...
Eastby Sanatorium, Yorkshire ...	4	” ” ...	” ” ...
Freshfield Children’s Sanatorium, Southport ...	6	” ” ...	” ” ...
Heswall Sanatorium, Cheshire ...	4	Surgical Tuberculosis...	” ” ...
Preston Royal Infirmary, Deepdale Road, Preston ...	2	Acute Surgical ” ...	The Preston Royal Infirmary.
2. MATERNITY—			
Preston Royal Infirmary, Deepdale Road,	*12	Maternity Ward ...	” ” ...
3. CHILDREN—			
Preston Royal Infirmary, Deepdale Road.	31	Children’s Beds ...	” ” ...
4. FEVER—			
Infectious Diseases Hospital ..	64	Scarlet Fever, Diphtheria, Enteric Fever	Town Council.
5. SMALL POX—			
Elswick Hospital, nr. Kirkham ...	6	Small Pox ...	By the Fylde, Preston and Garstang Joint Small Pox Board for the Council.
6. GENERAL HOSPITAL—			
Preston Royal Infirmary, Deepdale Road,	212	See below.	

\*Opened 1922.

## THE PRESTON ROYAL INFIRMARY.

The accommodation now consists of 63 beds for male medical and surgical cases, 59 for female medical and surgical cases, 31 for children and 17 for ophthalmic, aural, etc. cases. "Lostock Hall," recently given by Messrs. Geo. & R. Dewhurst's to the Infirmary for use as a Convalescent Hospital, was opened in June, 1922, to accommodate 42 patients. The Infirmary has special clinics for eye, ear, nose and throat complaints, X-Ray treatment and Radiographs, an Orthopaedic Department for massage and electricity and a Venereal Diseases Department. New Departments are in course of erection for treatment of Orthopaedic and Venereal Disease cases.

During 1921, there were 2,229 In-patients and 8,192 Out-patients. Of the In-patients 1,583 were discharged cured, 385 relieved, 143 unrelieved and 118 died. The average daily number of In-patients was 138 and the average duration of treatment was 23.5 days, whilst the death rate was 5.3 per cent.; 22 of the deaths took place within 24 hours, and 16 within 48 hours of admission. When these are deducted, the death rate is reduced to 3.5 per cent. 2,146 Operations were performed; 951 major, 390 aural and ophthalmic, 805 in Out-patients' Theatre, and 137 patients were treated at home. 1,108 in the X-Ray Department, 314 in the Orthopaedic Department, 481 in the Venereal Diseases' Department and 56 patients were sent to the Convalescent Hospitals.

The cost of maintenance was £25,471 and the income £25,374. The average cost per week for In-patients was £2 6s. 1d., the average total cost per In-patient being £7 8s. 3d., and per Out-patient 6s. 9d.

### Institutional provision for Homeless Children and Illegitimate Infants.

Name and Situation.	Nature of Accommodation.	By whom provided.
The Preston and District Home for Homeless Infants' Association, 5 Garstang Road, Fulwood .....	Home for Homeless Infants ...	A Committee aided by grants from the Ministry of Health, Local Bodies and Private Subscriptions.
The Poor Law Institution, Fulwood	.....	The Guardians of the Preston Union.

### Ambulance Facilities.

#### (a). Infectious Diseases.

A Motor Ambulance was provided by the Council in place of the Horse Ambulance in March, 1921.

#### (b). Non-Infectious Cases.

Ambulances provided by the Council and maintained at the Fire Station.

### POOR LAW RELIEF.

Mr. Thomas H. Bentham, Clerk to the Guardians, has kindly supplied the following information.

Number of persons received from the Borough of Preston into the Fulwood Workhouse Hospital :—

		Men.		Women.		Children.		Total.
1920	...	229	...	213	...	66	...	508
1921	...	205	...	294	...	109	...	608

The total amount of Out-door Relief paid during 1921 in respect of the Borough was £12,133 16s. od., compared with £3,055 18s. od. in 1920.

### NATIONAL INSURANCE ACT.

Mr. Irvine R. Dearnley, Clerk to the Preston Insurance Committee, has kindly supplied the following information.

#### INSURED POPULATION.

The mean number of insured persons in the Borough for the year was 60,291.

It will be observed that there is an increase in the insured population over the year 1920. This is accounted for in several ways. A large number of women would remain in Insurance for some period following their war occupations and, with falling incomes, all persons who had temporarily been in receipt of amounts over the income limit for insured persons would again be brought into Insurance, and further, a large number of discharged soldiers by reason of their army contributions would remain in Insurance for considerable periods whether they resumed work or not.

The year 1922 should see a more or less normal figure, and I think it may be estimated that there will be about 56,000 insured persons in the Borough continuously insured. This is a big proportion of the population and, like all manufacturing centres, Preston will be above the general average in this respect. One outstanding feature is the large proportion of insured women in the Borough. When the Insurance Act was originally framed it was estimated that the proportion would be two men to one woman whereas in Preston they are nearly equal.



## MEDICAL BENEFIT.

Number of prescriptions dispensed—143,388. Total cost—£5,645 17s. 9d. Average cost—9.45d. Frequency—2.93 per person. Average cost per insured person—2s. 3.66d.

To the figures given above there should be added approximately about 6,000 prescriptions dispensed by the Preston 'Friendly Societies' Medical Association, who supply their own medicines direct and not through a chemist.

Commencing with the year 1921 the doctors terms of service were amended in several ways, more particularly with regard to the keeping of records.

The number of doctors on the Insurance Committee's list for the year 1921 is the same as that for 1920, viz., 42. The number of chemists' establishments is 24, and, with one exception, every *qualified* chemist in Preston is on the Insurance Committee's list.



## II.—Sanitary Circumstances of the District.

### WATER SUPPLY.

The water supply was described in the report for 1920. Work has already been begun on the new Scheme authorised in the Preston Corporation Act, 1921.

Seven samples were taken for analysis from well waters supplying farms in the outlying portions of the town, and a good report obtained in each case.

Rivers and Streams, Drainage and Sewerage were dealt with in the report for 1920.

### CLOSET ACCOMMODATION.

There are approximately 27,667 fresh water closets, 500 waste water closets, 14 trough closets (exclusive of those in use at Schools) and 37 privy middens, of the latter 5 are in Miller Road, off Ribbleton Lane, 31 are situated on farms and cottages in the Rural area of Deepdale, Ribbleton and Fishwick Wards, and are not within reach of a sewer, and one is in South Meadow Lane and is due for removal as the land upon which it stands is opened up for building.

The Sanitary Conveniences in use at Factories and Workshops and Schools are not included in the above.

### SCAVENGING.

The system in force was described in the report for 1920. The work has been satisfactorily carried out.

### WORK OF THE DISTRICT SANITARY INSPECTORS.

#### DWELLING HOUSES.

The number of inspections and re-inspections are tabulated for each district :—

#### Inspections.

	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Inspected on Complaint .....	1298	990	961	783	1080	5112
Re Infectious Diseases .....	150	123	189	169	49	680
Housing and Town Planning Acts .....	438	414	372	324	99	1647
Rent Restriction Act .....	39	...	4	12	6	61
TOTALS .....	1925	1527	1526	1288	1234	7500

**Re-Inspections.**

	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Inspected on Complaint .....	3485	1374	1635	2048	1555	10097
Re Infectious Diseases .....	60	52	92	94	21	319
Housing and Town Planning Acts .....	1212	689	315	132	89	2437
Rent Restriction Act .....	71	...	...	4	...	75
TOTALS .....	4828	2115	2042	2278	1665	12928

These inspections and re-inspections involved the sending of 4,353 letters with regard to the common defects, i.e., yard flagging, cleansing and limewashing, and provision of dustbins. Also 1,613 Informal Notices were served in connection with the surveys under the Housing Regulations, 1910, and the Housing and Town Planning Act of 1919. There were also 60 Certificates under the Rent Restriction Act issued and 30 Statutory Notices under the Public Health Acts and 193 under the Housing and Town Planning Acts served by the authority of the Council. Legal action to enforce the requirements of the Council were taken in the following instances:—

**Defective Drains.**

Defendant undertook to carry out the work, and pay costs of proceedings. Case adjourned and work executed.

**Defective Drains, Gutter and Downspout.**

Case withdrawn on payment of	£	s.	d.
Cost of work ... ..	7	10	1
„ opening drain ... ..	1	12	6
„ Summons ... ..	0	4	6
„ Advocate's fee ... ..	2	2	0
Total ... ..	10	9	1

The results of the work are tabulated below, 5,094 houses in all have been dealt with. The improvements, repairs and alterations are multifarious and cover practically every possible kind of defect. The work done in connection with the Public Health Acts generally relating to one and only occasionally to more than one defect. That in connection with the Housing and Town Planning Act, relating as it did to the poorer

class of property, dealt with a variety of defects in each individual house which were discovered in a thorough sanitary survey.

In one case involving five Owners, Notices calling for work to be done under the latter Act were not obeyed and the work was done by the Local Authority by their powers given in Section 28 of the Act.

TABLE IIA.  
Summary of Work done during the year 1921.

	SANITARY DISTRICTS					
	No. 1	No. 2	No. 3	No. 4	No. 5	TOTAL
HOUSES (By Public Health Acts), etc.—						
Number dealt with .....	1343	400	902	1070	684	4399
Provided with a sufficient supply of water .....	2	2	20	3	...	27
Roofs, etc. repaired .....	126	59	120	58	108	471
Means of ventilation improved .....	121	...	13	19	5	158
New floors laid or repaired .....	72	15	19	16	16	138
Yards repaved .....	16	1	19	2	...	38
Yards flagged .....	...	...	9	5	11	25
Water spouts fixed or repaired .....	171	53	93	82	92	491
Down spouts disconnected from drains .....	...	...	11	...	...	11
Cleansed and limewashed .....	618	93	249	226	142	1328
Overcrowding discontinued .....	9	...	...	...	9	18
Nuisances arising from keeping of swine and other animals abated .....	1	...	44	73	16	134
New sinks fixed .....	2	...	1	1	1	5
Wastepipes trapped, ventilated, renewed, or repaired .....	9	9	39	24	34	115
Bath or wash hand basins fixed .....	2	1	...	2	3	8
Portable ashbins provided .....	508	49	176	220	153	1106
General nuisances .....	63	62	75	226	161	587
WATER CLOSETS—						
Number dealt with .....	174	97	199	160	186	816
Total number of W.C.'s provided .....	3	...	2	3	3	11
To replace other form of closet .....	1	...	...	1	4	6
Additional provided to number of closets previously obtaining .....	1	...	...	...	8	9
Improved .....	156	95	4	68	127	450
Limewashed or cleansed .....	22	...	18	...	...	40
Soil pipes repaired or renewed .....	...	...	3	3	4	10
Provided with a sufficient supply of water .....	73	...	37	21	18	149
New flush pipes fixed .....	15	...	6	...	11	32
New cisterns fixed .....	6	...	41	18	14	79
New hoppers fixed .....	29	...	63	16	8	116
Hoppers repaired .....	3	...	...	2	...	5



TABLE IIA.—(Continued).

(By THE HOUSING, TOWN PLANNING, &C., ACTS, 1890 TO 1919)—	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Number dealt with .....	304	88	168	81	54	695
Lighting and ventilation improved .....	138	7	90	23	3	261
Rendered free from dampness .....	23	...	26	1	...	50
Roofs reconstructed or repaired .....	17	24	29	10	13	93
Floors repaired or relaid .....	42	25	24	12	10	113
Fireplaces provided or repaired .....	180	...	16	16	9	221
Staircases repaired .....	7	...	7	4	2	20
Walls (outside) pointed and repaired .....	4	8	8	13	5	38
Gable walls pointed .....	6	...	2	...	2	10
Chimneys repaired or pointed .....	10	6	23	17	3	59
Provided with separate and sufficient water closet accommodation .....	2	6	...	11	7	26
„ „ proper refuse receptacle and place to keep same .....	24	...	8	2	11	45
„ „ new sinks or other sanitary fittings .....	6	2	7	3	8	26
„ „ improved yard pavements .....	7	...	1	4	2	14
„ „ proper means of drainage .....	10	3	...	3	...	16
„ „ eaves, gutters, and fall spouts.	53	13	26	27	19	138
Closed: Compulsorily .....	...	...	...	3	...	3
Houses cleansed and limewashed .....	141	86	114	43	18	402
Plastered wall surfaces repaired .....	141	86	114	25	14	380

**DRAINS.**

In addition to the foregoing, a large volume of work was done in connection with sanitary defects arising out of drains. The inspections were as follows:—

**Inspections.**

	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Street Gullies .....	127	1	14	4	68	214
Drains .....	94	1927	1606	310	1021	4958

**Re-Inspections.**

	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Street Gullies .....	...	...	...	...	14	14
Drains .....	191	3677	2096	73	1000	7037

The results of the inspections are as follows :—

Drains.—Total dealt with ... 1,207.

	SANITARY DISTRICTS					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Opened out for inspection and tested .....	13	133	43	61	89	369
New construction .....	1	...	3	6	3	13
Reconstruction .....	11	2	17	4	17	51
Cleansed or repaired .....	161	224	138	180	245	948
Disconnected from Sewer .....	...	...	2	...	...	2
Ventilation provided .....	1	...	...	...	...	1
Old drains abolished .....	...	...	1	1	...	2
Cesspits filled in .....	...	...	3	...	...	3
Gullies provided .....	1	...	5	3	2	11
Subsoil drains provided .....	4	...	1	...	...	5

The 369 drains opened out for inspection and testing were a Corporation liability. They involved the undertaking of 95 different jobs done partly by Corporation workmen and partly by Contractors. The average time expended on each job was 31.7 hours, and the average cost of labour was £3 6s. 11.36d. In January the cost of Corporation labour was 2s. od. and 2s. 0½d. per hour. In September the rate was lowered to 1s. 7½d. and 1s. 8d. per hour. The comparative costs for labour supplied by Contractors was 2s. 8d. and 2s. 2d. per hour. The cost of material added a further 8s. 1.9d. to each job. The proportion of the work done by the Council's men and Contractors is as follows :—

	£	s.	d.
Corporation time, 1,252½ hours at a cost of ...	108	3	5
Contractors' time, 1,765½ hours at a cost of ...	209	16	7½
Corporation material ... ..	6	2	3
Contractors' material ... ..	32	18	3
	<hr/>		
	£357	0	6½
	<hr/>		

#### FACTORIES AND WORKSHOPS.

The following tables deal with the premises registered, the number of inspections and the results of such inspections. Of the 99 defects originally reported by H.M. Factory Inspectors, 98 were remedied. In only one case has it been found difficult to get the work done and here the difficulty arises from the nature of the structure. There is very little out-working done in the Borough, the premises upon which it is carried out have been frequently inspected and found satisfactory.

TABLE IIb.

## List of Factories and Workshops on Register during the year 1921.

	DISTRICT					TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	
Artificial Teeth Makers .....	3	...	5	5	8	21
Bakers and Confectioners (Retail) .....	52	34	27	21	35	159
Bakers (Public) .....	...	2	...	1	3	6
Basket Makers .....	1	2	2	...	2	7
Beer Bottlers .....	3	2	1	1	5	12
Biscuit Makers .....	...	1	2	...	...	3
Boot, Shoe, and Clog Makers, Leather Curriers	25	21	29	25	20	120
Brass Founders .....	...	...	1	1	3	5
Breweries .....	...	1	1	...	1	3
Brush Makers .....	1	...	...	...	2	3
Cabinet Makers, Wood Carvers, Upholsterers...	5	8	6	5	10	34
Coach Builders .....	3	1	...	3	1	8
Cotton Waste Cleaners and Dealers .....	...	3	...	1	...	4
Cotton Manufacturers .....	24	8	13	7	4	56
Coopers .....	1	1	2	1	...	5
Cycle Makers and Enamellers .....	1	6	6	4	6	23
Engravers .....	3	...	...	1	6	10
French Polishers .....	3	2	...	2	3	10
Ironfounders, Motor Engineers & Boiler Makers	5	11	5	12	9	42
Joiners, Builders, Wheelwrights, Wood Turners	13	15	5	6	11	50
Laundries .....	3	...	2	...	...	5
Marine Store Dealers .....	...	5	...	3	3	11
Milliners, Dressmakers Underclothing Manu- facturers .....	25	45	41	35	34	180
Picture Framers, Mount Cutters, Gilders.....	2	1	...	1	3	7
Photographers .....	4	2	1	6	3	16
Plumbers, Painters .....	10	9	11	12	14	56
Printers, Bookbinders .....	...	3	...	8	16	27
Restaurant Keepers .....	3	3	30	6	4	46
Rope and Twine Makers .....	2	1	...	...	...	3
Saddlers .....	1	4	...	2	1	8
Smiths, Black and White, and Tinplate .....	5	11	5	6	9	36
Stone and Marble Masons .....	7	1	2	1	...	11
Sugar Boilers .....	4	1	...	1	2	8
Tailors .....	13	16	6	15	27	77
Watch Makers and Jewellers .....	9	9	3	5	7	33
Wire Workers .....	...	2	2	...	1	5
Offensive Trades {	Fell Mongers .....	...	...	...	1	1
	Soap Boilers .....	...	...	1	2	3
	Fat and Tallow Melters ...	1	2	1	2	6
	Knacker Yards .....	1	...	...	...	1
	Gut Scrapers .....	...	1	...	...	1
	Tripe Boilers .....	1	2	2	...	5
Various .....	2	13	5	18	21	59
TOTAL .....	236	249	215	217	269	1186



TABLE IIc.

## Factories, Workshops, Workplaces and Home-Work.

## 1.—INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Visits to Warehouses .....	154	...	...
Factories (including Factory Laundries) .....	112	3	...
Workshops (including Workshop Laundries) .....	1466	...	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report) .....	46	...	...
Total .....	1778	3	...

## 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Act :—</i>				
Want of Cleanliness .....	22	22		
Want of Ventilation .....	...	...		
Overcrowding .....	1	1		
Want of drainage of floors .....	6	6		
Other Nuisances .....	37	37		
Sanitary accommodation {	insufficient .....	...		
	unsuitable or defective...	26	25	
	not separate for sexes....	7	7	
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (s. 101) .....	...	...		
Breach of special Sanitary requirements for bakehouses (s.s. 97 to 100).....	...	...		
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report) .....	...	...		
Total .....	99	98		

TABLE II<sub>D</sub>. HOME WORK.

[illegible]

#### 4.—REGISTERED WORKSHOPS.

## 5.—OTHER MATTERS.

Workshops on the Register (s. 131) at the end of the year.							Number.	Class.	Number.
Factories	...	...	...	...	...	...	194	Matters notified to H.M. Inspector of Factories :—	
								Failure to affix Abstract of the Factory and Workshop Act (s. 133) 1901	...
Workshops	...	...	...	...	...	...	770	Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5). 1901	...
Workplaces	...	...	...	...	...	...	57	Notified by H.M. Inspector	25
								Reports (of action taken) sent to H.M. Inspector...	24
Retail Bakehouses	...	...	...	...	...	...	159	Other	...
								Underground Bakehouses (s. 101) :—	
Public do.	...	...	...	...	...	...	6	Certificates granted during the year	...
								In use at the end of the year	...
Total number of Workshops on Register							1186		2

### Summary of Work done under the Factory and Workshop Act, during the Year 1921

	No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District	Total.
Number of Factories and Workshops on Register .....	236	249	215	217	269	1186
„ Circular Letters sent re Out-workers .....	...	25	...	...	...	25
„ Out-workers reported .....	...	32	29	...	26	87
Visits to Factories and Workshops ...	160	476	136	47	204	1023
„ Retail Bakehouses .....	81	286	44	40	58	509
„ Public Bakehouses .....	...	29	...	4	12	45
„ Home-workers premises .....	...	32	...	...	26	58
Drains tested .....	...	...	...	4	...	4
DEFECTS FOUND AND REMEDIED :—						
Defective Drains .....	1	...	1	3	1	6
„ Slopstone Pipes .....	...	...	...	...	...	...
„ Spouts and Roofs .....	1	...	2	...	3	6
„ Water Closets .....	14	...	3	4	5	26
„ Yard Pavement .....	...	...	2	...	...	2
Limewashing required .....	3	4	3	10	2	22
General Nuisances .....	1	2	5	2	2	12
Insufficient W.C. accommodation for Females .....	...	...	...	1	1	2
Insufficient W.C. accommodation for Males .....	...	..	...	3	2	5
No receptacle for refuse .....	4	...	...	...	5	9
Manure Accumulations .....	1	...	...	1	2	4
Overcrowded .....	...	...	...	...	1	1

Total defects found, 99; remedied, 98.



## OFFENSIVE TRADES.

The following offensive trades are established in the Borough :—

Fell Monger, 1; Soap Boiler, 3; Fat and Tallow Melter, 6; Knackers Yard, 1; Gut Scraper, 1; Tripe Boiler, 5.

All these premises are subject to frequent inspection. 516 Visits were paid during the year. The conditions are as satisfactory as the nature of the trade will allow. The Knackers Yard has been structurally improved and is at present undergoing further alteration. The premises and plant have been improved in four other instances.

## PIG KEEPING.

There are 36 Pig Keepers in the Borough, 7 of whom have been granted permission since 1918. 14 are Farmers and 17 kept pigs before the War. The total number of pigs kept is 202.

The sanitary conditions, especially those relating to the distance from inhabited dwellings, drainage, condition of floors and buildings, and means of temporary storage of manure are satisfactory in most cases. 47 Visits were made to the premises.

## COMMON LODGING HOUSES.

There are 34 Common Lodging Houses on the register, two having been closed since 1916. The accommodation consists of 860 beds in 232 rooms. The average number of lodgers per night is 558.

The premises were visited regularly at intervals of 3 days or 3,211 visits in all. Proper conditions as to cleanliness, ventilation, keeping of registers, whitewashing and avoidance of overcrowding, etc., were firmly enforced by the Sanitary Inspectors.

There are no houses let in lodgings on the register. A few which might come under this designation are regarded and treated as Common Lodging Houses.

In 12 instances the sanitary condition of the buildings has been improved, 31 have been limewashed and cleansed and 4 nuisances abated.

## THE RAG FLOCK ACT.

No samples have been taken.

## RATS AND MICE DESTRUCTION ACT.

In addition to the exhibition of Public Notices and Press advertisements during Rat Week, and the work done under this head by the Port Sanitary officials, the advice of the Department was sought by proprietors of infested premises on numerous occasions. In 34 cases the "invasion" was of a casual nature and repelled by traps, poison and dogs, and in 48 cases an examination proved that it was due to structural defects of the drains and buildings. In each case the possibility of further infestation was removed by the execution of the necessary repairs. In these operations over 480 rats were destroyed. Marine Store dealers and offensive trades were free. The necessary inspections and supervision of the work entailed called for 395 visits of the staff.

## STABLE PREMISES

Have been the subject of 116 visits. As a result, seven have been cleansed, one repaired, new middens provided in seven instances, covers to middens in three instances, five old middens abolished and 46 offensive accumulations abolished.

## THEATRES AND CINEMAS.

In accordance with the regulation issued by the Ministry, Circular 120, 25/8/20, each place of entertainment has been visited and a certificate issued to the proprietor for presentation to the Licensing Authority, who require such certificate before they can grant the licence. This certificate must state that the premises are satisfactory in sanitary and other respects. Special attention has been paid to ventilation, cleanliness, condition of the dressing rooms and, in the case of picture houses, the proximity of the front seats to the screen. The standard laid down in the Interim Report of the Joint Committee on Eyestrain in Cinemas appointed by the Illuminating Engineering Society in October, 1919, has been adopted, i.e.,

(1) "That the angle of elevation subtended at the eye of any person seated in the front row by the length of the vertical line dropped from the centre of the top edge of the picture to the horizontal plane passing through the observer's eye shall not exceed  $35^{\circ}$ . The height of the eye above the floor level being assumed to be 3ft. 6in." and

(2) "That provided that recommendation (1) is complied with the angle between the vertical plane containing the upper edge of the picture and the vertical plane containing the observer's eye and the remote end of the upper edge of the picture should not be less than  $25^{\circ}$ ."

These definitions seem formidable, but the measurements are actually simple. By their adoption we were able to effect the removal of two rows of seats in one established house, and one row in a house in course of construction. During the year the District Inspectors paid 67 official visits to places of entertainment.

#### THE SHOPS ACT 1912 AND 1913.

720 Observations were made under the above Act. In one case a contravention relating to the displaying of a Notice with regard to mixed Shops was reported and a prosecution followed. The summons was dismissed on a technicality.

#### MISCELLANEOUS.

In addition to the work under the foregoing heads, a large volume of inspection under miscellaneous heads was carried out. These were—

Hospitals	...	...	...	...	...	4 visits.
Tents and Vans	...	...	...	...	...	140 visits.
Offensive Accumulations	...	...	...	...	...	34 visits.
Animals so kept as to cause a nuisance	...	...	...	...	...	120 visits.
Paving of Lobbies	...	...	...	...	...	37 visits.

#### SMOKE OBSERVATIONS.

Smoke observation, which before the War was regarded as one of the most important duties of the Sanitary Inspectors, was suspended during the War and resumed in the early part of the year.

There are approximately 135 factory chimneys in the Borough and observations have been made upon 82 of them.

Owing to the disturbed conditions caused by the coal strike and the consequent poorness of fuel reasonable freedom from smoke could not be expected, but I am bound to say that the pollution of the atmosphere is severe and must have a serious effect upon the health of the inhabitants. Observations shewed that the chimneys could be classified into good, moderate and bad.



There were 14 which at one or another observation emitted black smoke for five or more than five minutes in the half hour (Group A), 24 chimneys failed to reach the five minutes (Group B), and 44 chimneys were not observed to emit black smoke during any part of an observation (Group C).

The results of the observations are tabulated below. The whole of the observations made in each group of chimneys are included although black smoke was not necessarily in the case of groups A and B emitted at each observation.

TABLE II.E.

	GROUP.			TOTAL.
	A.	B.	C.	
Number of Chimneys .....	14	24	44	82
No. of Observations of 30 minutes' duration	32	40	57	129
Time in Minutes :—				
BLACK SMOKE .....	157.25	65.5	...	222.75
Average per Observation .....	4.91	1.64	...	1.72
Percentage of Total Observations .....	16.3	5.45	...	5.75
MODERATE SMOKE .....	320.25	342.0	166	828.25
Average per Observation .....	10.00	8.55	2.91	6.42
Percentage of Total Observations .....	33.3	28.5	9.7	21.40
NONE OR SLIGHT .....	482.5	792.5	1544	2819
Average per Observation .....	15.09	19.81	27.09	21.85
Percentage of Total Observations .....	50.3	66.0	90.3	72.84
Total Observations .....	960	1200	1710	3870
Percentage :—				
Mechanical Feed .....	35.71	33.33	29.54	33
Forced Draught .....	21.43	16.66	20.45	19.5
Mechanical Feed and Forced Draught...	14.28	...	15.9	10.9

In the majority of cases the excess of black smoke is due to two causes, careless firing and under boiler capacity. Heavy smoke is frequently seen in the early morning and after periodical flue cleaning. In some instances there is a structural fault such as deficient height of stack or length of flue. The installation of mechanical feed and forced draught does not seem to be of great influence according to the figures in the table. It is possible that action will be taken by the central Authority on the lines of the recently published final Report of the Committee on Smoke and Noxious Vapours Abatement.

Disinfection of materials is carried out by the Council at their Disinfecting Station at Argyll Road, adjacent to the Destructor Works.

A Motor Van was provided in January, 1921.

There is also a well equipped Disinfector provided at the Isolation Hospital for its particular use.

The staff (four men) are also responsible for the disinfection of premises after infectious disease and after death from Tuberculosis or change of address of persons suffering from Tuberculosis. The work is summarized below :—

TABLE II.F.

			District <b>No.1</b>	District <b>No.2</b>	District <b>No.3</b>	District <b>No.4</b>	District <b>No.5</b>	<b>Total.</b>
Beds ...	...	...	123	138	162	139	56	618
Mattressses	...	...	13	20	9	12	15	69
Bolsters	...	...	120	138	162	139	56	615
Pillows ...	...	...	225	260	204	278	112	1079
Other items of Bedding, etc.			20	192	12	4	6	234
Houses ...	...	...	169	176	256	205	115	921
Rooms ...	...	...	29	29	20	14	29	121
Schools ...	...	...	1	1	8	3	1	14
Institutions	...	...	...	...	...	9	3	12
Jumble Sales	...	...	4	9	3	7	3	26
Picture Palaces	...	...	12	12	12	12	...	48
Vehicles	...	...	...	6	...	1	1	8
Books ...	...	...	1	50	16	4	4	75

#### PORT SANITARY ADMINISTRATION.

On January 1st, 1921, Inspector Baron was relieved of his duties as District Inspector and was able to devote his whole time to the duties as Port Sanitary Inspector, Canal Boats Inspector and Smoke Inspector of chimneys in the immediate neighbourhood.

Other improvements made have been the transfer of the Ratcatcher to the Port Sanitary Authority, the provision of a disinfestation station at Argyll Road, now at the point of completion, and the adoption of a scheme for the treatment of dangerous ship-borne disease (cholera, plague and yellow fever) which is now before the Ministry of Health. I am able to report that the sanitary conditions of the shipping entering the Port has materially improved and that every assistance has been given by Ship Masters and Owners.

The annexed tables show that there has been a diminution in foreign and an increase in coastwise vessels entering the Port. The total number of vessels and the total tonnage is larger than the corresponding number last year.

TABLE IIg.

Amount of Shipping entering the Port Sanitary District during the year 1921.

		Number	Tonnage	Number Inspected		Number reported to be defective	Number of Orders Issued
				By the Med. Officer of Health	By the Inspector of Nuisances		
Foreign	{ Steamers	96	76056	45	86	52	380
	{ Sailing	4	3786	3	4	3	17
	{ Fishing	...	...	...	...	...	...
Total Foreign		100	79842	48	90	55	397
Coastwise	{ Steamers	755	150205	51	630	125	682
	{ Sailing...	18	2695	8	18	5	6
	{ Fishing	...	...	...	...	...	...
Total Coastwise		773	152900	29	648	130	688
Total Foreign and Coastwise		873	232742	107	738	185	1085

TABLE II<sub>H</sub>.

Rats destroyed in 1921.

[illegible]





TABLE II<sub>J</sub>.

## Return of Port Sanitary Work for the year 1921.

Foreign	{	Steamships Inspected	...	...	...	...	86
		Sailing Vessels Inspected...	...	...	...	...	4
		Re-Inspections	...	...	...	...	105
Coastwise	{	Steamships Inspected	...	...	...	...	630
		Sailing Vessels Inspected	...	...	...	...	18
		Re-Inspections	...	...	...	...	196
Condition of all Vessels Inspected		{	Good	...	...	...	553
			Defective	...	...	...	185

## DEFECTS REMEDIED.—

Forecastle re-painted	...	...	...	...	...	...	8
Do. cleansed	...	...	...	...	...	...	171
Dirty Lockers, Washhouses, Store Rooms, etc. cleansed	...	...	...	...	...	...	606
Foul Water Tanks cleansed	...	...	...	...	...	...	34
Do. Bilges cleansed	...	...	...	...	...	...	11
Do. and defective W.C.'s cleansed and repaired	...	...	...	...	...	...	171
Accumulations of Offensive Refuse removed	...	...	...	...	...	...	32
Gear stored in Crew's Quarters removed	...	...	...	...	...	...	1
Damp Quarters remedied	...	...	...	...	...	...	3
Leaky Decks overhead caulked	...	...	...	...	...	...	2
Defective Port-lights, Sky-lights, and Dead-lights remedied	...	...	...	...	...	...	26
Do. Ventilators repaired	...	...	...	...	...	...	4
Do. Chain Pipes repaired	...	...	...	...	...	...	3
Inadequate Drainage remedied	...	...	...	...	...	...	4
Bare Iron over Sleeping Berths sheathed	...	...	...	...	...	...	8
Defective Lavatories and Waste Pipes repaired	...	...	...	...	...	...	18

The Chief Imports.	Source.	The Chief Exports.	Destination.
Timber .....	Canada, Norway,	Coal,	England and Ireland.
Wood Pulp .....	Sweden, Finland.	General Cargo.	England and Ireland.
Esparto Grass .....	North Africa.		
General Cargo .....	England, Scotland, Ireland.		
Live Stock .....	Ireland.		
Stone .....	Wales.		

## Public Health (Unsound Food) Regulations, 1907.

## LIST OF ARTICLES INSPECTED.

Wheat	Barley	Flour	Oatmeal	Sugar	Nuts
Herrings	Sardines	Brislings	Beef	Pork	Mutton
		Potatoes	Veal		

## LIST AND WEIGHT OF ARTICLES CONDEMNED AND DESTROYED.

					Tons.	Cwts.	Qrs.	Lbs.
Potatoes	...	...	...	...	25	10	0	0
Flour	...	...	...	...	0	12	3	11
Beef	...	...	...	...	1	14	0	27
Mutton	...	...	...	...	0	1	1	10
Pork	...	...	...	...	0	2	2	18
Veal	...	...	...	...	0	0	1	2

The whole of the flour and 4 tons of the potatoes were used as cattle food.

REPORT ON THE ADMINISTRATION OF THE CANAL BOATS ACTS, 1877  
and 1884.

The records show that 57 boats have been registered of which 28 have been cancelled thus leaving 29 on the register.

The principal commodity carried by the boats from Preston is coal. Nearly all the boats return light, odd cargoes of gravel are brought to Preston from Carnforth.

One infringement of the Regulations has been discovered. The after cabin of Express No. 7 was gutted and refitted and new deck fixed and painted. On inspection the boats have been found in a fairly satisfactory condition.

No cases of infectious disease were reported during the year.

The work of supervision has been carried out by Inspector Baron in addition to his Port Sanitary duties; no special remuneration being provided for this portion of his work.

219 Inspections have been made during the year.



### III.—Food.

#### (a). MILK SUPPLY.

There are 18 farms in the Borough housing 193 cows, the daily yield of which amounts to 367 gallons.

The conditions are on the whole unsatisfactory, there is no general system of grooming the cows, wearing overalls or washing the hands before milking.

Of the 18 farms or producers 13 are directly unsatisfactory in respect of defects in connection with one or more of the following—ventilation, lighting, or structural conditions. 24 Cowsheds have been limewashed, four have had their floors repaired, eight have had their yards repaired, one midden has been removed to a more suitable position and four nuisances have been abated.

There are 36 dairies evenly distributed over the Borough which sell nothing but milk. This trade is usually associated with a milk round, and there are 32 shops where milk is sold in association with other goods, principally grocery and hardware. The amount sold daily in the dairies is 1,886 gallons and from shops 537 gallons daily, that is a total of 2,423 gallons daily, of which 367 gallons are produced within the Borough, and the remainder by approximately 55 farmers outside the town.

The District Inspectors have paid 277 visits to farms and dairies, and the Food Inspector 182. The condition of the dairies is unsatisfactory. The facilities for cleansing the vessels are most unsatisfactory, those for cooling milk either absent or very bad, such as depositing the kit in a washtub and arranging for a flow of water from the nearest supply pipe. Opportunities for contamination are frequent. The amount of contamination seemed comparatively greatest in the case of the smaller sales. In two cases structural alterations have been carried out at the request of the Sanitary Inspector. Five dairies have been limewashed. In ten instances proper covered milk vessels have been provided, and in four, nuisances have been abated. The whole question of milk production, wholesale distribution and retail sale, is now ripe for further legislation.

The results of milk sampling under the Food and Drugs Act are given at the end of this Section.

The analyses shew that the average fat content of the samples was 4.55 per cent. Other Solids 8.97 per cent., Total Solids 13.43 per cent. This high average is obtained by some samples of extraordinary richness, for instance 19.5 per cent., 11.50 per cent. and 11.40 per cent. milk fat were returned for samples No. 34, 69 and 131. The general fat content was about 3.5 per cent., only three samples falling below 3 per cent.

Eight samples of milk were examined from the point of view of ascertaining the presence of dirt and the Tubercle Bacillus. The samples were taken, under strict aseptic conditions, cooled, packed in ice and taken direct to the laboratory. The results of the examination are tabulated below :—

Date of Sample.	Description of Milk.	Extraneous Products per 100,000 parts	Cellular Products per 100,000 parts	No Bacteria found. per c.cm.		Microscopical evidence of Tubercle Bacillus.
				incubation 48 hours LLA at 40°c	incubation 3 days SGPB at 20°c	
March 11th .....	Mixed.	6	20	191,000	324,000	None.
„ 10th .....	„	Trace.	44	7,050	6,900	None.
„ 10th .....	„	6	16	652,000	2,435,000	None.
„ 10th .....	„	Trace.	34	191,000	13,650	None.
„ 8th .....	„	4	42	3,250	1,600	
„ 8th .....	„	12	32	1,160,000	530,000	
„ 8th .....	„	6	18	432,000	192,000	
„ 8th .....	„	6	42	126,000	188,500	

The samples in heavier type may be regarded as clean milk. The conditions under which the milk was produced at these farms led one to expect favourable results. In 1918 and 1919 the County Council successfully prosecuted twelve producers for selling milk containing “an adulterant” namely cow-dung. The amounts in these cases varied from 7 to 13 parts per 100,000. In only one of our samples was the extraneous matter higher than 6 parts and I was advised by the late Professor Sheridan Delépine to let the matter rest.

Special examination of the milk produced in the Borough was made in regard to the presence of the Tubercle Bacillus. The method used is inoculation of guinea pigs. The work was done at the Public Health Laboratory, Manchester.

24 Mixed samples were submitted. In two instances the Tubercle Bacillus was found. A visit to the farm in these two cases was arranged by the Veterinary Surgeon, Mr. Arnold Porritt, and the cows examined. In one case an obviously diseased animal was discovered and slaughtered by the owner. In the other case the milk of two animals suspected as suffering from Tuberculosis was separately examined with a negative result.



## MILK AND CREAM REGULATIONS, 1912 AND 1917.

Three samples of Preserved Cream were purchased each of which met the requirements of the above Regulations.

## ICE CREAM.

The sanitary conditions as to cleanliness of the premises used for the manufacture of ice cream has been the subject of careful oversight on the part of the staff. 129 Visits were paid during the year. The larger firms are extremely careful in their handling of these easily contaminated goods, while the small men—the greater number—prepare and store their goods in a frequently undesirable manner. The old custom of serving the goods retail in glasses and washing the latter after use in filthy water and drying on a dubious cloth has now changed for the most part to disposal in “wafers” and “cornets.” In addition to the general oversight of the sanitary method of conducting the business, alterations were carried out in five cases at the instance of the Inspector.

Preston is fortunate in that the bulk of the slaughtering of animals and dressing of carcasses for the purpose of food is carried out in a Public Abattoir, which was erected about 25 years ago. In addition, the Co-operative Society have a large and well-constructed slaughter house which was built about 20 years ago. The number of private slaughter houses has been greatly reduced in recent years. Twenty-eight years ago they were 83 in number.

Under the present system every carcase prepared either at the Cattle Market, the Co-operative Society's slaughter house, and a large proportion of those in private slaughter houses, is inspected. Inspector Marsden paid 3,748 visits to the various premises and over 18 tons of meat was surrendered.

The details of the Inspectorial work are as follows :—

Visits to Public Slaughter houses	...	...	...	586
Visits to Private Slaughter houses	...	...	...	3162
Carcases specially submitted	...	...	...	673
Carcases condemned	...	...	...	119
Inspection of carcasses under Contagious Diseases of				
Animals Act	...	...	...	3



Of the 119 carcasses condemned, 102 were Tubercular Bovines and 17 were Bovines suffering from other diseases such as Actinomycosis (one case), Acute illnesses, Pneumonia or Puerperal Fever, etc., and several cases of what is known as Joint Felon. The work done under this head by the Port Sanitary Inspector is given in the Section of the Report relating to Port Sanitary work.

#### SLAUGHTER HOUSES.

		In 1914.		In January, 1920.		In Dec., 1920.		In Dec., 1921.
Registered	...	—	...	—	...	—	...	—
Licensed	...	21	...	14	...	13	...	13
		—		—		—		—
Total	...	21	...	14	...	13	...	13
		—		—		—		—

The lighting and ventilation of two slaughter houses have been improved.

In addition to the above there are four houses used exclusively for the slaughter of pigs which are neither registered nor licensed..

The number of animals slaughtered during the year is as follows:—

	Beasts.	Calves.	Sheep.	Pigs.
Abattoir .....	3588	914	18698	1022
Co-operative Slaughter house.	1037		3147	1583
Private Slaughter- Houses .....	1511	1017	7487	1546

PREMISES USED FOR PREPARATION OF FOOD (Potted Meat, Meat Pies, Pressed Beef, Black Puddings, Sausage, Polony and Brawn).

The conditions were described in the report for 1920. 24 Visits of inspection were made during the year.

#### BAKEHOUSES.

The details of the sanitary work are shewn in the Factory and Workshop Tables in Part II. of the Report. The conditions are satisfactory.

#### FRIED FISH SHOPS

Have been the subject of 63 visits. The conditions are satisfactory. Sanitary improvements have been effected in six instances.

## (c). OTHER FOODS.

The wholesale Fish Market is regularly supervised by Inspector Crossthwaite, 261 visits being paid. The retail markets (600 visits) are also continuously examined.

The neighbouring Port of Fleetwood supplies the largest amount of fish to the town and the outlying districts, although consignments are received almost daily from many other fishing centres, viz. :—

Wet Fish.—Grimsby, Milford Haven, Hull, Swansea, Peterhead, Glasgow, Campbeltown, Rothesay, Oban, Liverpool, Eyemouth, Baltimore, Londonderry, and Killibegs.

Dry Fish.—Lowestoft, Yarmouth, Hull, Fraserburgh, and Wick.

Shell Fish.—Lytham, St. Annes, and Cark-in-Cartmell.

Rabbits.—Dumfries, Kirksanton (Carnforth), Lazonby, and Dalbeattie.

The quantity of goods reaching the markets and the amount condemned are as follows :—

Weight	Rabbits, Game. Poultry,			Fruit and Vegetables.			Wet Fish.			Dry Fish.			Shell Fish.			Totals.					
	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.			
Examined	29	1	0	5	11	1	30	54	10	2	34	6	3	0	63	12	3	349	8	18	2
Condemned	0	5	3	5	11	1	15	1	2	2	4	3	0	2	0	23	5	1			

The possibilities of danger to the Public Health arising from Shell Fish has received attention during the year and is now being considered by the Ministry of Health.

## GENERAL.

The Butter and Fruit Markets are subjected to frequent inspections. 1,177 Visits were paid by the Food Inspector and 150 by the District Inspector, making a total, including the visits paid to the Fish Market, of 2,188,

## (d). SALE OF FOOD AND DRUGS ACT.

TABLE . IIIA.

Substances purchased and submitted for Analysis during the year 1921.

Name of Article.	No. of Samples.	Result.	No. of Samples	Result.
	Formal.		Informal.	
Butter .....	17	Genuine.	28	One Sample mouldy & rancid, remainder genuine.
Cheese .....	11	do.	24	Genuine.
Coffee .....	6	do.	15	do.
Cocoa .....	...	...	4	do.
Ice Cream .....	...	...	1	do.
Jam .....	...	...	18	do.
Lard .....	21	Genuine.	27	do.
Milk .....	45	do.	5	do.
Mustard .....	3	do.	6	do.
Bee Wine .....	...	...	1	do.
Pepper (white) .....	1	Genuine.	6	do.
Sweets (boiled) .....	3	do.	4	do.
Tea .....	16	do.	27	do.
Sugar .....	15	do.	22	do.
Malt Vinegar .....	2	do.	...	...
	140		188	



TABLE IIIB.

**Substances formally purchased and submitted for Analysis during the Year 1921.**

Name of Article.	No. of Samples	Result.
Milk .....	1	No. 103. 2.55% Fat, 8.81% Other Solids. Total Solids 11.36%. Deprived of 15% of Milk Fat. No action.
Milk .....	1	No. 967. 2.80% Fat, 9.06% Other Solids. Total Solids 11.86%. Summoned; case withdrawn.
Milk .....	1	No. 969. 2.88% Fat, 8.79% Other Solids. Total Solids 11.67%. Summoned; case withdrawn.

#### **IV.—Prevalence of, and control over, Infectious Diseases.**

The seven principal Zymotic Diseases. Small Pox, Scarlet Fever, Measles, Whooping Cough, Diphtheria, Typhoid Fever, and Epidemic Diarrhoea, caused 116 deaths, giving a Zymotic death rate of 0.95 per 1,000 living as against a rate of 1.59 for the previous ten years, and the lowest recorded rate of 0.57 in 1921. A table shewing the mortality from and morbidity of these diseases for the previous five decennia appeared in last year's report. A similar table dealing with the past ten years is appended, and is followed by tables relating to the age, sex, Ward, and time distribution of these diseases.

TABLE IVA.

Summary of Zymotic Deaths for 1921 and the preceding ten years.

YEAR	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	Average
Population	119900	121950	117277	105845	106747	109935	111936	118514	118070	117630	117216	114307.0
No. of Deaths. Enteric ...	1	1	2	4	2	11	4	10	10	8	21	7.3
Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	14	26	2	35	14	61	45	65	90	5	35.7
Scarlet Fever	3	2	2	...	...	10	23	42	29	36	19	16.3
Whooping Cough	29	10	5	35	28	12	27	23	5	42	20	20.7
Diphtheria ...	13	13	19	13	24	38	36	25	32	41	36	27.7
Diarrhoea ...	70	30	43	42	50	69	88	67	133	46	170	73.8
Totals ...	116	70	97	96	139	154	239	212	274	263	271	181.3
Zymotic Rate	0.95	0.57	0.82	0.90	1.30	1.40	2.13	1.79	2.32	2.23	2.31	1.59



TABLE IVB.

Cases of Infectious Diseases for the year 1921, classified according to age and sex.

Notifiable Disease.	Under 1 year		1—2		2—3		3—4		4—5		5—10		10—15		15—20		20—25		25—45		45—65		65 and over		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Diphtheria .....	1	1	4	1	7	6	6	7	8	9	33	37	13	19	2	6	...	2	5	9	...	2	...	...	79	99
Erysipelas .....	...	...	...	...	...	...	...	...	...	...	...	2	1	1	...	3	...	...	5	7	6	18	2	...	12	33
Scarlet Fever .....	...	...	1	1	5	6	5	7	15	10	73	82	53	63	11	25	3	2	3	...	...	2	...	...	169	198
Enteric Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2	...	3	1	3	1	1	...	...	3	10
Puerperal Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3	...	5	...	...	...	...	...	8
Ophthalmia Neonatorum .....	2	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	10
Pulmonary Tuberculosis .....	...	...	...	...	...	1	...	...	2	1	14	6	6	4	4	13	16	8	40	31	11	4	3	2	96	70
Other Forms of Tuberculosis .....	...	1	1	3	2	...	...	1	2	...	10	8	5	5	3	3	1	1	...	3	1	2	...	...	25	27
Influenzal Pneumonia .....	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	1	...	...	...	...	...	3	1
Primary Pneumonia .....	1	2	2	...	2	1	1	1	1	...	2	1	2	1	1	1	1	...	4	2	2	2	2	...	21	11
Malaria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	3	...
Dysentry .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	1	1
Cerebro Spinal Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2
Acute Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals .....	4	14	8	5	16	14	12	16	28	20	133	136	81	94	22	53	22	20	61	61	22	33	5	4	414	470

TABLE IVc

Cases of Infectious Diseases, classified according to Ward Distribution.

Notifiable Disease.	Total	St. John's.	Avenham.	Christ Church	Ashton.	Maudland.	St. Peter's.	Moorbrook.	Park.	Trinity.	Deepdale.	Ribbleton.	Fishwick.
Diphtheria .....	178	5	8	20	11	18	19	12	16	12	27	21	9
Erysipelas .....	46	1	3	7	1	2	3	3	9	4	4	5	4
Scarlet Fever .....	367	14	27	36	47*	42	34	43	50	19	20	17	18
Enteric Fever .....	13	...	1	1	1	1	2	3	2	...	1	1	...
Puerperal Fever .....	8	1	1	1	...	...	1	1	2	...	1	...	...
Ophthalmia Neonatorum .....	12	5	...	2	...	1	1	1	...	1	...	1	...
Pulmonary Tuberculosis .....	166	...	...	...	...	...	...	...	...	...	...	...	...
Other Forms of Tuberculosis .....	52	...	...	...	...	...	...	...	...	...	...	...	...
Influenzal Pneumonia .....	4	...	...	...	...	...	1	1	2	...	...	..	...
Primary Pneumonia .....	32	1	...	7	1	4	9	6	1	2	...	1	...
Malaria .....	3	...	...	2	...	...	...	...	...	...	1	...	...
Dysentery .....	2	...	...	...	...	...	...	...	...	...	2	...	...
Cerebro Spinal Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica .....	2	...	...	...	...	...	...	...	2	...	...	...	...
Acute Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...

\*Includes 12 cases at St. Thomas' Home, Hesketh Street.

TABLE IV<sub>D</sub>.

### Cases of Infectious Diseases, classified according to time incidence.

[illegible]



## SCARLET FEVER.

Cases notified, 367. Deaths, three.

Incidence per 1,000 population	...	...	...	3.06
Mortality per 1,000 population	...	...	...	0.02
Morbidity per 100 notified cases	...	...	...	0.82

The number of cases represented an increase of 132 per cent. over the number notified last year (158). The numbers in 1919, 1918, 1917 and 1916 were 152, 62, 111 and 397 respectively. A fairly rapid increase was noted in March, reaching its maximum in May and declining until September. A second and larger increase became apparent in October which reached its height in December and continued during January of the following year. There were two marked school epidemics at St. Walburge's in the early part of the year and at English Martyrs' later. A curious feature was that the eastern and western portions of the town were infected while scarcely a single case was reported in the north, central and southern districts until September. St. John's, Trinity, Deepdale, Ribbleton and Fishwick Wards were the least affected.

An epidemic occurred in the St. Thomas' Home—an Institution for Roman Catholic Boys—which is under the supervision of the Home Office. The first case occurred on December 17th and two further cases were notified on December 20th. The premises were then subjected to a careful sanitary inspection and proved to be without defect as regards ventilation, lighting, occupancy, water supply, milk supply, sanitary appliances and drainage. Arrangements were made by the Authorities of the Home for a daily examination of all the boys by their Medical attendant, and although the demand for beds at the Isolation Hospital was at this time somewhat pressing, it was arranged to remove all new cases there at short notice. Immediate and complete disinfection was carried out but not withstanding these precautions further cases occurred on December 21st (2), December 22nd (6), December 28th (3), December 29th and December 30th. One of the cases notified as suspicious on December 21st was removed for observation but was found later not to have the disease and three of the six notifications made on December 22nd were withdrawn before removal was effected. There was one further case notified early in January, 1922, which does not appear in the tables. As contact with the outside world of these boys is only made under strict supervision and the opportunity for contracting infection correspondingly limited it may be stated with a fair degree of accuracy that the first boy contracted Scarlet Fever when watching a football match at Deepdale. Considering that the

Home accommodates over 90 persons, most of them of a susceptible age, one is thankful that the epidemic lasted so short a time, involved so few cases and occasioned no mortality.

In estimating the value of the various factors which serve to spread the infection especial emphasis should be given to the mild unrecognised case. Below is the result of enquiries into the source of infection in which it is shewn that a definite source was found in 69 cases (19 per cent.) only, and that excluding those cases which were related in point of time, locality and school there still remain a large proportion in which no definite source could be traced. Places of worship, places of amusement, public conveyances, shops and any conditions which entail propinquity are alike dangerous to susceptible persons.

#### SOURCE OF INFECTION.

	Cases.
1. Hospital Return Cases ... ..	10
2. Infected by case returned from Hospital to neighbourhood ...	3
3. Related to other cases in point of time and locality ... ..	81
4. Related to other cases in point of time and school ... ..	40—50
5. Infected by case isolated at home ... ..	12
6. Infected by case removed to Hospital ... ..	20*
7. Infected by undiagnosed case ... ..	7
8. Infected at Workplace ... ..	1
9. Occurring in Institutions ... ..	16*

\* Includes 11 at St. Thomas' Home.

Another important point is delay in seeking medical advice. A reference to the Summary below shows that 80 per cent. of the cases are notified within 5 days of onset and that in the remainder of the cases the notification is unduly delayed. The general reason seemed to be that the parents were unaware of the nature of the illness until obvious symptoms such as peeling of the skin became manifest.

Interval between onset of disease and notification :—

43.82 per cent. within 48 hours of onset.  
 36.51 per cent. between 2 and 5 days.  
 8.70 per cent. between 5 and 7 days.  
 6.18 per cent. between 1 and 2 weeks.  
 4.77 per cent. over 2 weeks.



# INFLUENCE OF HOSPITAL ISOLATION ON PREVENTING FURTHER SPREAD.

298 Cases were removed to Hospital. There were ten return cases and 20 secondary cases, including 11 from the St. Thomas' Home, occurred in households already infected. All these secondary cases were removed to Hospital so that the total secondary cases arising represented **11.2 per cent.** of the 268 primary cases.

There were 71 cases isolated at home. Of these nine were secondary cases. The corresponding percentage was **14.5**. If all the cases had been isolated at home there would, according to the figures given above, have been 48 secondary cases, an increase of nine, and if all the cases had been removed to Hospital, there would have been 37, a decrease of two. In this connection it should be borne in mind that only in those cases where home isolation was possible and the character of it approved was removal to Hospital not insisted upon. In the majority of cases it is obvious that non-removal would have exposed the family to a seriously increased risk. Further, owing to delayed notification, in a large proportion of instances, home and Hospital cases were on one level as regards infection for the period elapsing between onset and removal.

The influence of the size of the house seemed very slight. I compare the proportion per 1,000 tenements of tenements of various sizes which prevailed in Preston at the 1911 Census with the proportion in those houses where Scarlet Fever occurred.

Rooms in House .....	1	2	3	4	5	6	7 or over.
Census, 1911 .....	3	11	128	375	333	88	72
Scarlet Fever .....	—	—	12	370	218	275	123

The excess observed in the larger houses is due to the greater facilities for employing medical advice enjoyed by the occupants. The deficit in the one, two and three roomed houses is due to the fact that as a rule they do not house persons of a susceptible age (children), while the five-roomed house—the most favourable dwelling for the artizan family containing young children—shews a deficit which was to be expected in the light of preceding remarks as to the mild unrecognised case.

The amount of overcrowding was remarkably small, two four-roomed houses occupied by nine persons each, two by ten persons each and one by 11 persons, with two five-roomed houses occupied by 11 persons each, seven instances or 2 per cent. in all constituting the total.

Watching this disease from year to year the gradually declining severity of the symptoms and the diminution in the death rate bring one to the conclusion that it is a much less menace to the Public Health than in former years, and is of less moment than other diseases such as Measles and Whooping Cough, which do not receive nearly as much attention from Public Authorities. Whether it will maintain this position remains to be seen.



## DIPHTHERIA.

178 Cases. 13 Deaths.

Incidence per 1,000 population	...	...	...	1.49
Mortality per 1,000 population	...	...	...	0.108
Morbidity per 100 notified cases	...	...	...	7.30

This disease mainly attacked children aged 5—10 and next those aged 10—15. The remaining age groups were evenly affected. Christ Church, St. Peter's, Deepdale and Ribbleton Wards were most heavily infected, accounting for half the cases. The number of cases notified per month increased up to May and declined materially during July, August and September. November and December saw an increase which was continued into 1922.

The source of infection is a difficult matter to determine. Of the 178 cases our enquiries pointed definitely to an association in point of time, infection and school attendance in two instances only. Direct infection by an immediately previous case in the house occurred in 12 instances and in 13 instances the case was one of a geographical group with a time association. Even more problematical were two cases attributed by the relatives to attendance at a place of entertainment, and two cases where there were cases of sore throat but considered to be diphtheria in the house at the same time. In six cases, four of whom were members of the same family, infection occurred at houses where the existence of a gross sanitary defect was discovered. One case occurred in a patient who suffered from recurrent inflammation of the Tonsils and finally in one house the cat had suffered from some unknown malady a short time previously. Thus we have 27 cases or 15.2 per cent. where the source of infection could be definitely traced, and 12 cases or 6.7 per cent. where the source was problematical. In the remainder or 78.1 per cent. there was no source indicated. Had wholesale swabbing of contacts been carried out no doubt we should have found a large number of Bacteriological carriers. What the determinant factors of the variability in the numbers of persons infected by Diphtheria are, is not known. It is probable that under certain meteorological conditions the number of "carriers" who are not themselves actually suffering increases and thus the susceptible are exposed to a more concentrated attack. This hypothesis has a proved analogue in the case of Cerebro Spinal Meningitis, and I see no reason to expect different behaviour from the bacillus of Diphtheria.

The importance of early medical treatment of Diphtheria cannot be exaggerated. The action of Antitoxin is remarkably beneficial when administered in the early stages, so much so that if parents would remember the golden adage "always look at a sick child's throat" the mortality caused by this disease would be much lower than it is. In this connection it may be observed that 30 per cent. of the deaths occurred in those cases, constituting 5.4 per cent. of the whole, in which medical advice had not been sought until the child had been ill for over a week.

Interval between onset of disease and notification :—

- 40.5 per cent. within 48 hours of onset.
- 43.8 per cent. within 5 days of onset.
- 10.3 per cent. between 5 and 7 days after onset.
- 5.4 per cent. over a week after onset.

The influence of housing was not marked. There were 166 families affected and the total population at risk consisted of 913 persons. In seven instances overcrowding was noted.

TREATMENT. 120 Cases were admitted to Hospital. Details may be found on page 80. The remainder were isolated at home and were under the care of private medical practitioners. Every case admitted to the Hospital had received antitoxin before admission.

Diphtheria Antitoxin supplied to Medical Practitioners during the year :—

Dosage in units ...	2,000	...	4,000	...	8,000
No. of Packages...	48	...	144	...	116

In New York and other American cities extensive work has been done on what is known as the "Schick Test." On a smaller scale this work has been repeated in Bristol, Manchester and elsewhere. The importance of this Test lies in the fact that it is possible to determine by certain reactions to a minute dose of Diphtheria Toxin the liability to contract Diphtheria, and to treat those found to be susceptible by injections of a mixture of Toxin and Antitoxin and thus to confer an active immunity to the disease which lasts a few years. Thus, if an outbreak of the disease occurred at an Institution housing young children the test is applied to each, and those found positive are treated by inoculation described above. By this means the outbreak is abruptly cut short and anxiety removed. It is probable that a few years will see a great extension in the application of this work.

#### ENTERIC FEVER.

Cases notified, 13. Deaths, one.

Incidence per 1,000 population	...	...	...	0.108
Mortality per 1,000 population	...	...	...	0.008
Morbidity per cent.	...	...	...	7.69

The cases were spread over the year (see Table IV D.), February, March, June and October shewing no cases. The ages affected were from ten to sixty-five years.

Three cases were notified in Moorbrook, two each in St. Peter's and Park, and with the exception of St. John's, Trinity and Fishwick Wards, the remainder provided one case each.

Enquiries into the possible causation were not always satisfactory. The water supply, milk and general sanitation as a cause could in each case be excluded. The first case in the series died on the day of notification (January 4th) and no particulars were obtained.



In one case in which the diagnosis was doubtful and not confirmed by a blood test, the exciting cause was given as a visit to the Grand National.

Cases 215 and 302 contracted the disease by nursing their mother who herself was notified later. The original source here was not ascertained.

Cases 236, 348, 384, and 404 similarly evaded elucidation.

Cases 485, 521 and 565 were definitely associated with the consumption of Shell Fish, which, as shewn elsewhere in the report, are liable to sewage contamination.

#### PUERPERAL FEVER.

Eight cases were notified. They were evenly spread over the year, and no association of time or place was noted with any other case in the series. Further, not more than one case occurred in the practice of any one medical practitioner or midwife. In four cases there were abnormalities in the actual labour reported. The usual procedure as to disinfection of the midwife's instruments and clothes and of the patient's house was carried out.

The continued high incidence of this fatal disease is disquieting. Seven deaths are given by the Registrar General as having occurred in the Borough, the figure according to information in my possession should be six. Two of the deaths occurred in the Royal Infirmary and four at their homes.

I include a table shewing the incidence and mortality of the disease during the last ten years for comparison with the year under review.

TABLE IVe.  
Summary of Cases of Puerperal Fever in the last 10 years.

YEAR	No. of Cases Notified	No. of Deaths	No. of Births Registered	Incidence Rate per 1000 Births	Mortality per 1000 Births
1911	6	2	2726	2.20	0.73
1912	2	1	2753	0.72	0.36
1913	7	2	2888	2.42	0.69
1914	7	2	2841	2.46	0.70
1915	9	5	2546	3.53	1.96
1916	3	3	2315	1.29	1.29
1917	1	1	2019	0.49	0.49
1918	3	2	1906	1.57	1.05
1919	9	1	2086	4.31	0.48
1920	16	9	2984	4.69	3.01
Average	6.2	2.6	2506.4	2.47	1.03
1921	8	7	2811	2.84	2.49



## MEASLES.

Only forty-five cases of Measles were brought to the knowledge of the Department and these were notified by head teachers. Seventeen occurred among children at the Grimshaw Street School. There were no deaths.

## WHOOPING COUGH

Occasioned a heavy mortality—seven boys and 22 girls. Nineteen were infants, nine between one and two years, and one between two and five years. The system of notification by head teachers produced 398 notifications. With the exception of six departments, cases occurred among children attending every School. St. Saviour's, St. Stephen's, St. Mary's R.C., St. Michael's, St. Andrew's, Roebuck Street, St. Peter's, and St. Ignatius' Schools were the most heavily infected.

The high infectivity, the distressing nature of the complaint and the severe mortality make this disease, with Measles, the despair of sanitarians. Hospital treatment would have no effect on an epidemic because the sufferer is most infectious in the early stage of the cough, that is, before the characteristic whoop appears. It would of course be advantageous to those who are severely ill or are, as a complication, suffering from Broncho-Pneumonia. The knowledge that infectivity rapidly diminishes from the onset and has disappeared at the end of four weeks is helpful, as the old belief that infection lasted as long as the whoop occasioned much loss of school attendance and unnecessary hardship on conscientious parents.

It seems to me that the best way to deal with the disease is on the lines of continued propaganda among parents and in epidemic times, notification, and the temporary expansion of the Health Visiting Service. The Nurses' duty would be to urge due parental care and to see that those needing it are provided with medical treatment; to teach and supervise the feeding of those badly affected; to teach the proper disposal of infectious material, i.e., the vomit and expectoration, and finally to keep in touch with charitable agencies and to co-ordinate their work with that of the Municipal and Poor Law Medical Services.

## EPIDEMIC DIARRHOEA.

Seventy persons died of Diarrhoea.

The following table shews the mortality occasioned by this disease since 1911 in which year the meteorological conditions resembled those of last year :—

TABLE IVF.  
Deaths from Epidemic Diarrhoea.

Year	Estimated Population	0—1	1—2	2—5	Other Ages	Total	Mortality per 1000 living
1911 .....	117,216	137	15	5	13	170	1.45
1912 .....	117,630	28	4	3	11	46	0.39
1913 .....	118,070	105	23	3	2	133	1.13
1914 .....	118,514	55	8	1	3	67	0.57
1915 .....	118,118	68	14	1	5	88	0.75
1916 .....	119,611	41	7	3	18	69	0.58
1917 .....	118,993	25	4	3	18	50	0.42
1918 .....	118,595	19	6	3	14	42	0.35
1919 .....	122,168	29	4	1	9	43	0.35
1920 .....	122,133	16	3	3	8	30	0.24
1921 .....	119,900	50	6	1	13	70	0.58

A comparison with the Lancashire towns may be seen in Table IE.

Fifty of the deaths were those of Infants and themselves caused an infant mortality of 18 per 1,000 born or over one-sixth of the whole.

Diarrhoea occurs in epidemic form in the later Summer and early Autumn months and has been shewn to depend upon the temperature of the ground at a depth of four feet reaching 56 degrees. Whether any further consideration than the fact that this connotes the most favourable breeding time for the domestic fly arises is possible but hardly likely. The disease is associated with general insanitary conditions, poverty, poor housing, overcrowding, careless handling of food and vessels used for its preparation, and dirt. Last year the abnormal Summer and Autumn presented most favourable conditions for an outbreak.

In many cases the existence of the disease was discovered by the Health Visitors. In some the registration of death was the first intimation. The organisation outlined for use in connection with Whooping Cough would be of considerable value.

#### OPHTHALMIA NEONATORUM.

Thirteen cases were notified. Two of these were later withdrawn. Eleven cases were treated by medical practitioners at the patient's home, and two as out-patients at the Preston Royal Infirmary. One case was removed to the Poor Law Institution at the time when complete cure was almost effected. The remainder were followed up until the condition of the eyes became normal. There were no cases of loss of sight of one or both eyes.

## TUBERCULOSIS.

Dr. Walker reports as follows :—

### (1). INCIDENCE OF THE DISEASE.

It is gratifying to be able to record a considerable decrease in the number of notifications of this disease received during the year under review. In 1921 the number of cases of all forms of tuberculosis notified in Preston was 218. This figure is 88 less than that of 1920, when 306 notifications were received.

The following table shews the number of notifications of tuberculosis in England and Wales and in Preston during the years 1915—1921 inclusive :—

TABLE IVc.

Year	NOTIFICATIONS.—England and Wales.			NOTIFICATIONS.—Preston.		
	Pulmonary	Non-Pulmonary	Total	Pulmonary	Non-Pulmonary	Total
1915	73,538	22,864	96,402	342	52	394
1916	72,479	23,877	96,356	310	59	369
1917	73,654	22,096	95,750	338	49	380
1918	72,741	19,391	92,132	238	22	260
1919	65,229	16,821	82,050	281	25	306
1920	61,655	15,851	77,506	246	60	306
1921	Not	available.	...	166	52	218

A reference to the above table will shew that the chief feature is the continual decline in the number of pulmonary cases. On looking for the cause of this it is well again to point out that not to any one particular factor or measure can this encouraging fall be ascribed, but rather is it due to the continued application of all those principles and efforts which have been shewn in the past to influence the incidence of the disease and to which we must continue to look in the future for the ultimate conquest of this malady.



The following three tables deal with the age and sex distribution of the notified cases (primary notifications on Form A.), the relative incidence in the different Wards of the Borough, and the occupations in age and sex groups :—

TABLE IVH.

## Summary of Notifications during the year 1921.

Age periods	Notifications on Form A.											
	0.1.	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65-	Total
Pulmonary Males	...	2	14	6	4	16	25	15	10	1	3	96
„ Females	...	2	6	4	13	8	20	11	3	1	2	70
Non-Pulmonary Males	...	5	10	5	3	1	...	...	1	...	...	25
„ Females	1	4	8	5	3	1	2	1	...	2	...	27

TABLE IVI.

## Ward Incidence of Tuberculosis.

WARD		Number of Notified Cases.			Incidence Rate per 1000 of the population.
		Males	Females	Total	
Avenham	...	7	5	12	1.65
Trinity	...	9	17	26	2.63
Deepdale	...	16	10	26	2.37
Fishwick	...	5	4	9	1.18
St. Peter's	...	10	10	20	1.71
Ashton	...	11	10	21	2.31
St. John's	...	15	6	21	1.77
Moor Brook	...	10	7	17	1.91
Park ...	...	13	11	24	1.62
Maudland	...	8	7	15	1.54
Christ Church	...	6	9	15	1.73
Ribbleton	...	9	3	12	1.29
TOTALS	...	119	99	218	1.82

TABLE IVJ.

## Occupations in age and sex groups of notified cases of Tuberculosis, 1921

Occupation		0-1	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65+	Totals
Under School Age	M	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	7
	F	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	7
School Children	M	...	...	23	7	...	...	...	...	...	...	...	...	...	...	...	30
	F	...	...	15	7	...	...	...	...	...	...	...	...	...	...	...	22
Domestic Duties	F	...	...	...	...	...	2	9	4	4	3	1	1	...	2	...	26
Cotton Mill Operatives	M	...	...	...	1	...	3	1	3	...	1	...	1	...	...	...	10
	F	...	...	...	1	8	4	2	1	3	2	...	...	...	...	...	21
Labourers	M	...	...	...	...	2	4	2	...	2	2	1	1	1	...	1	16
Soldiers	M	...	...	...	...	...	2	...	...	1	...	...	...	...	...	1	4
Stonemasons	M	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2
Dressmakers Tailors and Milliners	M	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
	F	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Clerks	M	...	...	...	...	1	2	4	...	1	...	2	...	...	...	...	10
	F	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Charwomen	F	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	2
Rubber Workers	M	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Wood Workers	M	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
Painters	M	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	2
Foundry Workers	M	...	...	...	...	1	...	...	3	...	...	...	...	...	...	...	4
Shop Assistants	M	...	...	...	...	...	...	2	...	...	1	1	...	...	...	...	4
	F	...	...	...	...	2	...	...	1	...	...	...	...	...	...	...	3
Other Occupations	M	...	...	...	...	2	3	3	5	1	5	1	2	1	...	1	24
	F	...	...	...	1	1	2	...	...	...	...	1	...	...	...	...	5
No Occupation	M	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	2
	F	...	...	...	1	3	...	3	1	...	...	...	...	1	...	2	11
Totals	M	0	7	23	9	7	15	13	13	6	9	7	5	2	0	3	119
	F	1	6	15	10	15	9	15	7	7	5	3	1	1	2	2	99

## (2). DEATHS.

Turning to the deaths, the chief fact to be noticed is that the number of deaths has decreased *pari passu* with that of the notifications. The number of deaths registered as due to tuberculosis (all forms) during 1921 was 114. Of these 84 were due to pulmonary tuberculosis, and 30 to other forms of the disease, including tuberculous meningitis. Thus, out of the total deaths in the Borough, approximately one in every 14 was due to tuberculosis in some form or other, while the death rate from this disease was 0.95 per 1,000.

The Age and Sex distribution of these deaths is shewn in the following table :—

TABLE IVK.

Cause of Death.	Sex	All Ages	0—1	1—2	2—5	5—15	15—25	25—45	45—65	65 and over
Pulmonary Tuberculosis ...	M	42	...	...	...	2	8	15	16	1
	F	42	...	...	...	1	7	16	13	5
Other Tuberculous Diseases...	M	15	3	2	1	3	1	1	3	1
	F	15	4	1	1	5	1	2	1	...

It will be seen from the above that pulmonary tuberculosis was responsible for 84 deaths, giving a death rate of 0.70 per 1,000, while other forms of the disease caused 30 deaths, giving a death rate of 0.25 per 1,000.

A comparison of these death rates with those of the previous six years may be made from the figures given below :—

	Death rate per 1000, from Pulmonary Tuberculosis.	Death rate per 1000, from Non-Pulmonary Tuberculosis.
1915	..... 1.17	..... 0.44
1916	..... 1.05	..... 0.38
1917	..... 1.25	..... 0.39
1918	..... 1.20	..... 0.46
1919	..... 0.95	..... 0.34
1920	..... 0.91	..... 0.38
1921	..... 0.70	..... 0.25



The following table shews the deaths from tuberculosis in Preston during the last seven years, and also compares them with those in England and Wales during the same period :—

TABLE IVL.

Year	Deaths from Tuberculosis. England and Wales.			Deaths from Tuberculosis. Preston.		
	Pulmonary	Non- Pulmonary	Total	Pulmonary	Non- Pulmonary	Total
1915	41,676	12,619	54,295	131	46	177
1916	41,543	12,313	53,856	116	42	158
1917	43,113	12,821	55,934	133	42	175
1918	46,077	11,996	58,073	127	49	176
1919	36,662	9,650	46,312	114	41	155
1920	33,469	9,076	42,545	111	47	158
1921	Not	available.		84	30	114

### (3). PROGRESS OF THE CORPORATION'S SCHEME.

There is no need to recapitulate here the outline of the Corporation's Scheme for dealing with the prevention and treatment of tuberculosis—this was fully set forth in the previous year's report. In essential details the scheme has remained the same during the year under review and it will be sufficient to direct attention to the few changes that have occurred during the year.

On the administrative side the chief feature was the transference from Insurance Committees to Local Authorities of that part of the scheme dealing with the provision of institutional treatment for insured persons suffering from tuberculosis. May 1st, 1921, was the date on which Section 4 of the National Health Insurance Act, 1920 (which provides that Sanatorium Benefit shall cease to be included among the benefits conferred by Part I. of the National Insurance Act, 1911) came into operation. From that date Insurance Committees ceased to be responsible for providing treatment for insured persons suffering from tuberculosis, except in so far as medical treatment and attendance are provided as part of Medical Benefit under the Act. The passing of the Public Health (Tuberculosis) Act, 1921, completed the change by rendering it obligatory upon Local Authorities to provide institutional treatment for insured persons as well as for other members of the community.

This change, which had for long been foreshadowed and several times postponed, was effected smoothly in Preston and with no interference of the normal routine. For

this we are largely indebted to Mr. I. R. Dearnley, Clerk to the Preston Insurance Committee, whose willing assistance and experienced advice were of great value during a period of transition.

The net results of the transfer are that the Corporation is now responsible for the treatment of all cases, and that the whole of the work in connection therewith has been centralised. The Dispensary has become more than ever, the pivot of the scheme, and the administrative detail is collected into one department and is under the control of one officer.

Some modification has occurred during the year in the distribution of the beds at the various Sanatoria and other Institutions. All the beds occupied by the Insurance Committee were taken over by the Corporation from May 1st, with the exception of those at Dean Head Sanatorium. In June the children's beds at Bowdon Sanatorium had to be given up as information was received that only adults would be admitted there in future. As a consequence of this four beds for children were secured at Eastby Sanatorium, near Skipton. The four female beds at Wolsingham Sanatorium were given up, and the class of patients hitherto sent there were now sent to Bowden. Later in the year (December) two children's beds were recovered at Bowden. From the 1st April two beds were reserved for the Corporation at the Preston Royal Infirmary for the treatment of acute cases of surgical tuberculosis.

The average number of beds now available for the Corporation at the end of the year was 52. These beds were distributed as follows :—

Crossley Sanatorium, Cheshire	...	3 male, 3 female	...	...Pulmonary cases
Bowdon	„	6 female, 2 children	...	...
Stanhope	„	Durham...	...	...
Eastby	„	Yorkshire	...	...
Freshfield	„	Southport	...	...
“The Chestnuts,”	„	Preston	...	...
Heswall Institution	„	Cheshire	...	...
Royal Infirmary	„	Preston	...	...

The Open Air School has continued to play a useful part in the scheme and the Convalescent Homes at Lytham and St. Annes, to which children are admitted through the agency of a voluntary organisation, were again utilised during the Summer months.

The Corporation's own institution, The “Chestnuts” Sanatorium, at Ribblesdale, has again proved very valuable in helping to isolate the highly infectious pulmonary cases and there has never been any difficulty in keeping the beds filled—in fact, there are times when the necessity for more beds for this type of case is felt. At this institution an additional revolving shelter was acquired towards the end of the year through the kindness of Mr. Councillor Birtwistle.

One regrets again to record that no progress has been made towards the erection of the new Sanatorium and the foundation of an After-Care Committee. The reasons are, of course, obvious, being due to the continued financial stress and to the Ministry's veto on any extension of existing schemes.

In the year under review we cannot mark any definite advance in the scheme towards that comprehensiveness at which we are aiming: existing economic conditions are causing us to mark time. It is, however, satisfactory to note that the parts of the scheme already organised have been in active operation and are not without their results.

#### (4). WORK DONE DURING THE YEAR.

The following is a summary of the work carried out under the Dispensary Organisation :—

##### (a). At the Dispensary.

During the year 440 new patients were examined by the Tuberculosis Officer, either at the Dispensary or at their own homes.

Old patients made 4,835 attendances at the Dispensary for treatment, reports, or observation purposes.

Of the new patients 168 were diagnosed as suffering definitely from tuberculosis in some form or other—137 from pulmonary and 31 from non-pulmonary tuberculosis.

The pulmonary cases were classified according to the stage of the disease, as follows :—

Stage 1 (Turban) with slight general toxaemia .....	75
„ 1 „ marked „ „ .....	14
„ 2 „ slight „ „ .....	26
„ 2 „ marked „ „ .....	18
„ 3 „ slight „ „ .....	2
„ 3 „ marked „ „ .....	2

In the 31 non-pulmonary cases the disease affected the different tissues of the body as follows :—

Lymphatic Glands .....	17
Hip Joint .....	1
Spine .....	3
Abdomen (peritoneum, mesenteric glands).	4
Other Organs (skin, bones, etc.) .....	6



Details of the work done in the Bacteriological Laboratory will be found in another part of the report.

(b). Work of the Tuberculosis Nurses.

During the year the Dispensary lost the services of Nurse Jones, who left in June to take up a new appointment. Nurse M. Cole was appointed in her place and commenced duties in July.

During the year the Nurses made 186 visits to the homes of new patients and 2,884 re-visits to those of old patients.

The following table, compiled from the Nurses' house reports, deals with the numbers of persons and rooms in infected houses. The figures above the heavy line shew the number of families where there were more than two persons per room—they number six families consisting of 56 persons. As an example of reading the table it will be seen that, among the four-roomed houses there were four families of two persons each, ten families of three persons each, and so on.

TABLE IV<sub>M</sub>.

No. of Rooms in Infected Houses.	Number of Persons.												TOTAL.	
	1	2	3	4	5	6	7	8	9	10	11	12	Houses	Occupants.
	Number of Families.													
2 Rooms	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Rooms	...	4	4	10	7	7	...	1	2	...	...	...	35	163
4 Rooms	...	4	10	11	13	11	6	4	2	...	...	...	61	305
5 Rooms	...	3	7	4	12	14	4	1	3	1	...	1	50	272
6 Rooms	...	2	4	6	6	7	2	2	1	...	...	...	30	151
7 and over	...	...	...	...	...	...	1	...	...	...	...	1	2	19
Families	...	13	25	31	38	39	13	8	8	1	...	2	178	...
Persons	...	26	75	124	190	234	91	64	72	10	...	24	...	910

## (c). Residential Treatment.

Reference has been made above to the transfer, as from May 1st, 1921, of the responsibility of providing institutional treatment of insured persons from Insurance Committees to Local Authorities. In the table produced below, which shews the institutions to which patients were admitted during the year, the patients are divided into insured and non-insured, but this distinction ceased to be of any practical importance after May 1st as the Corporation provided all institutional treatment subsequent to that date. The table also indicates the average duration of stay at each institution.

TABLE IV<sub>N</sub>.

Institution.	Insured.						Uninsured.					
	Males	Females	Total Cases	Average duration of stay			Males	Females	Total Cases	Average duration of stay		
				weeks	days					weeks	days	
Crossley Sanatorium ...	17	18	35	11	1		...	2	2	7	0	
Stanhope „ ...	26	..	20	9	3		...	...	...	...	...	
Dean Head „ ...	5	...	5	10	1		...	...	...	...	...	
Wolsingham „ ...	...	10	10	8	6		...	...	...	...	...	
Bowdon „ ...	...	10	10	13	3	13	15	28	10	2		
Eastby „ ...	...	...	...	...	...	7	...	7	17	3		
Freshfield „ ...	...	...	...	...	...	1	17	18	14	5		
“The Chestnuts” „ ...	20	17	37	13	5	3	14	17	14	0		
Heswall Institution ...	...	...	...	...	...	3	2	5	28	0		
Preston Royal Infirmary ..	...	...	...	...	...	6	11	17	7	3		
TOTALS ...	68	55	123	11	4	33	61	94	12	4		

There were thus 217 cases that received residential treatment during the year—of these 65 were children under the age of 14 years.

## VENEREAL DISEASES.

The Medical Officer in charge of the Clinic reports as follows :—

Venereal Diseases Clinic, Preston. Annual Report, 1921.

This Clinic is open on Wednesdays and Fridays for men and on Tuesdays for women.

The average attendance at each session has been men 35.5, and women 30.

There have been 1,890 intravenous injections of Salvarsan substitutes, viz., .45 N.A.B. 490; and .75 N.A.B. 1,400. Intra-muscular injection of Hg. (Mercury) 2,119, and Medical treatment 1,597. A gratifying feature is that we are getting the cases generally at a much earlier stage which affords a greater certainty of early freedom from infection and of more rapid and permanent cure.

The attendance of the women is much more regular than that of the men, although I regret to say that infected prostitutes do not attend well.

Total attendances, 1921, 5,275, viz., men, 3,698; women, 1,577.

Cases under treatment or observation :—

January 1st, 1921. Syphilis—men, 104; women, 43. Gonorrhoea—men, 33; women, 2.  
January 1st, 1922. Syphilis—men, 151; women, 94. Gonorrhoea—men, 34; women, 10.

Over the whole of the country the numbers attending the Clinics which were 52,000 in 1918, 98,000 in 1919, and 105,000 in 1920, fell in 1921 to 84,000, and it is permissible to assume that this fall reflects a definite drop in the incidence of Venereal Disease.

(Signed) W. H. PIMBLETT, M.B., and C.M.,

Honorary Physician, Preston Royal Infirmary, and  
Medical Officer in charge of the Venereal Diseases Treatment Centre,



TABLE IVo.

Salvarsan Substitutes supplied to Medical Practitioners during 1921.  
(Not including supplies to V.D. Clinic).

GALYL.			NEOKHARSIVAN.				NOVARSENOBILLON.					
.25	.30	.45	.45	.6	.75	.9	.15	.30	.45	.6	.75	.9
...	6	...	...	...	...	...	...	17	59	15	159	9

TABLE IVp.

Table showing results of Examinations carried out for the Diagnosis of Venereal Diseases at the University,  
Department of Pathology, Manchester, during the year 1921.

SYPHILIS.					GONORRHEA.			Total Number of Specimens Examined
WASSERMANN REACTION.					SPIROCHÆTÆ.			
Total submitted for Examination	Positive	Negative	Not Examined		Total submitted for Examination	Positive	Negative	Not Examined
621	241	380	...		...	4	...	...
								625



TABLE IVQ.

**RETURN relating to all persons who were treated at the Treatment Centre at Preston Royal Infirmary during the year ended 31st December, 1921.**

	Syphilis		Soft Chancres		Gonorrhœa		Conditions other than Venereal		TOTAL	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of persons who, on the 1st January, 1921, were under treatment or observation for:—										
2. Number dealt with during the year in the out-patient Clinic <b>for the first time</b> and found to be suffering from:—										
Syphilis only .....	104	43	...	...	33	2	...	...	137	45
Soft Chancres only .....	123	50	...	...	...	...	...	...	123	50
Gonorrhœa only .....	...	...	2	...	...	...	...	...	2	...
Syphilis and Soft Chancres .....	...	...	...	...	72	7	...	...	72	7
Syphilis and Gonorrhœa .....	...	...	...	...	...	...	...	...	...	...
Gonorrhœa and Soft Chancres .....	21	10	...	...	21	10	...	...	42	20
Syphilis, Soft Chancres and Gonorrhœa .....	...	...	...	...	...	...	...	...	...	...
Conditions other than venereal .....	...	...	...	...	...	...	62	28	62	28
Total—Item 2 .....	144	60	2	...	93	17	62	28	301	105
Total—Items 1 and 2 .....	248	103	2	...	126	19	62	28	438	150
3. Number of persons who ceased to attend the out-patient Clinic										
(a) before completing the first course of treatment for .....	19	1	...	...	10	...	...	...	30	1
(b) after one or more courses but before completion of treatment for .....	40	...	...	...	4	...	...	...	44	...
(c) after completion of treatment, but before final tests as to cure of .....	6	...	...	...	1	...	...	...	7	...
4. Number of persons transferred to other Treatment Centres after treatment for .....	11	5	...	...	10	4	...	...	21	9
5. Number of persons discharged from the out-patient Clinic after completion of treatment and observation for .....	21	3	...	...	67	5	62	28	s. 88 N.S. 62	8 28
6. Number of persons who, on the 1st January, 1922, were under treatment or observation for:—	151	94	2	...	34	10	...	...	186	104
Total—Items 3, 4, 5 and 6 .....	248	103	2	...	126	19	62	28	438	150
7. Total attendances of all persons at the out-patient Clinic who were suffering from:—										
8. Aggregate number of "In-patient days" of treatment given to persons who were suffering from:—	2585	1222	15	...	952	180	126	60	3678	1462
9. Examination of Pathological material:—	...	...	...	...	...	...	...	...	...	...
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre .....	Nil.	33	...	...	...	...	Nil.	...	Nil.	...
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory .....	...	...	...	...	...	...	...	...	458	...

Intermediate Attendance for irrigation, Nil.—No irrigation facilities provided.





TABLE IV<sub>R</sub>.

Statement showing the services rendered at the Treatment Centre during the Year,  
classified according to the areas in which the patients resided.

[illegible]





## V.—Maternity and Child Welfare.

The number of children born, 2,811, and the birth rate, 23.44, shewed a slight decline compared with the corresponding figures of 1920, but maintains the pre-war level, see Table IB., p. 9. The rates in the various Wards are shewn in Table IA.; comparative figures of neighbouring towns and of the country as a whole in Tables ID. and IE. Of the 2,811 nett births, 1,440 were males and 1,371 females, and 2,534 were legitimate and 177 illegitimate. The illegitimate births comprised 77 males and 100 females. The percentage of illegitimate births of the total was 6.3, as compared with 5.8 in 1920.

The number of deaths of infants was 316, of these 185 were males and 131 females, and 278 were legitimate children and 38 illegitimate. The death rate per 1,000 born was 112. Comparative figures for previous years, for neighbouring towns and for the country as a whole, may be seen in Tables IB, ID and IE. The death rate among legitimate children equalled 109 per 1,000 born and among illegitimate children 215.

TABLE VA.

Year	Legitimate Births	Deaths of Legitimate Children	Rate per 1000 born	Illegitimate Births	Per cent of total	Illegitimate Deaths	Rate per 1000 born
1912	2583	...	...	141	...	...	...
1913	2722	...	...	142	...	..	...
1914	2671	...	...	147	...	...	...
1915	2387	...	...	132	...	...	...
1916	2150	...	...	143	..	...	...
1917	1831	...	...	167	...	...	...
1918	1754	...	...	181	...	...	...
1919	1984	...	...	174	...	..	...
1920	2810	280	99	174	5.8	21	120
1921	2534	278	109	177	6.3	38	215

The rate is higher than that of the previous year (101), approximately equal to that of the four preceding years and maintains the large improvement over pre-war experience. The main cause of the excess over last year was diarrhoea and enteritis from which 50 infants died, as compared with 22 in the previous year. There was also an unusual mortality caused by whooping cough, 19, compared with 7 in 1920. Tuberculous Meningitis was responsible for five deaths, compared with none in 1920. Diseases of the respiratory system shewed a slight excess. Congenital malformations and premature births caused approximately the same number of deaths, while atrophy, debility and marasmus shewed a decrease similar in amount to the increase under the diarrhoea, enteritis and gastritis heads.

Infant Mortality, 1921.  
 Nett Deaths from stated Causes at various Ages under One Year of age

CAUSE OF DEATH.	Under 1 Week.	1 - 2 Weeks.	2 - 3 Weeks.	3 - 4 Weeks.	Total under 1 Month.	1 - 3 Months.	3 - 6 Months.	6 - 9 Months.	9 - 12 Months.	Total Deaths under One Year.
	75 4	21 1	12 1	13 ...	121 6	67 1	51 ...	41 ...	29 ...	309 7
All Causes:—										
Certified .....										
Uncertified .....										
Small Pox .....	...	...	...	...	...	...	...	...	...	...
Chicken Pox .....	...	...	...	...	...	...	...	...	...	...
Measles .....	...	...	...	...	...	...	...	...	...	...
Scarlet Fever .....	...	...	...	...	...	5	4	6	4	13
Whooping Cough .....	...	...	...	...	...	...	1	...	2	1
Diphtheria and Croup .....	...	...	...	...	...	...	...	...	3	...
Erysipelas .....	...	...	...	...	...	...	...	2	...	2
Tuberculous Meningitis .....	...	...	...	...	...	...	...	2	...	...
Abdominal Tuberculosis .....	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases .....	...	...	...	...	...	...	1	...	...	...
Meningitis (not Tuberculous) .....	6	4	...	2	12	7	2	2	1	1
Convulsions .....	...	1	...	...	1	...	...	...	...	1
Laryngitis .....	...	1	1	1	3	4	2	7	5	1
Bronchitis .....	...	...	1	...	1	11	11	8	8	7
Pneumonia (all forms) .....	...	...	...	...	...	18	19	...	...	14
Diarrhoea .....	...	...	...	1	1	...	...	8	4	...
Enteritis .....	...	...	...	...	...	...	...	...	...	21
Gastritis .....	...	...	1	...	...	2	...	1	...	...
Syphilis .....	...	...	...	...	...	...	...	...	...	2
Rickets .....	...	...	...	...	...	2	...	...	...	...
Suffocation, overlying .....	...	...	1	...	...	...	...	...	...	1
Injury at Birth .....	3	1	...	...	4	...	...	...	...	...
Atelectasis .....	2	...	...	...	3	...	...	...	...	1
Congenital Malformations .....	1	5	1	2	9	3	3	1	...	7
Premature Birth .....	55	4	3	3	65	4	...	...	...	23
Atrophy, Debility and Marasmus .....	6	4	4	3	17	12	5	3	...	18
Other causes .....	6	2	1	1	10	...	3	1	2	6
Total.....	79	22	13	13	127	68	51	41	29	185 131

Twenty-five per cent. of the deaths of infants occurred in the first week of life and of these 77 per cent. died of premature birth and other pre-natal influences.

Forty per cent. of the infants failed to survive the first month and of these 71 per cent. died of premature birth and other ante-natal influences.

The mortality rapidly slows down after the first month of life and the cause of death becomes more dependent on post-natal influences such as diseases of the respiratory and alimentary systems.

The predominant part played by ante-natal causes as shewn above and by the number of still births reported upon later, are again emphasized as offering the most useful point of attack in our scheme.

Dr. Lowry reports as follows :—

At the beginning of 1921 there were 32 names on the roll of midwives for the Borough. During the year the name of one midwife was removed from the roll by the Central Midwives' Board, one midwife died and one was permanently incapacitated by illness. Six new midwives—all trained—gave notice of intention to practice their profession in the Borough during the year. This leaves on the roll the names of 35 midwives, 20 of whom are trained and 15 untrained.

During the year 77 routine inspections of midwives were made, nine special inspections, and ten midwives were inspected during their conduct of a case. The work and behaviour of the midwives has been found on the whole to be satisfactory.

#### ANTE-NATAL WORK.

At the Infant Welfare Centres there have been 909 attendances of expectant mothers who have benefited greatly by hygienic advice given them there. At the Maternity Clinic, at North Road, 180 new patients have been seen. These have made 315 attendances. Of the 180 about 80 per cent. were purely ante-natal. This is a much larger percentage than in the previous year.

#### INFANT WELFARE CENTRES.

The attendances at the Centres continue to increase.

Centre.	Attendances.		
	1921.	1920.	1919.
Fylde Road .....	2,732	2,397	1,474
Walker Street .....	2,824	2,770	2,344
Deepdale Mill Street ....	3,318	2,587	1,656
Manchester Road .....	2,507	1,899	1,758
Savoy Street .....	1,639	1,001	976
Total .....	13,020	10,654	8,208



The work has been previously described and consists of Medical Consultations, Health Talks to mothers, Lessons in making Infant Clothing, and a syllabus of Lectures and Demonstrations on Cookery.

#### STILL BIRTHS.

It has been possible to investigate with a fair degree of accuracy the causes of 85 still births occurring in the Borough. Adopting the same arbitrarily chosen division as last year these are as follows :—

Prematurity .....	42
Accidents of Labour .....	26
Illness of Mother .....	1
Abnormality of Child .....	8
Macerated Foetus .....	8
	—
Total .....	85
	—

It is not yet possible to give any accurate causes for so many premature births.

#### HOME HELPS.

These women were employed in cases of confinement where the mother had no one to look after the house, but they were only employed where a midwife was in attendance at the birth. Their duties were to keep the house clean, make meals, wash up and get the children, if any, off to school. All those employed did their duties very well and were of great assistance to the patient. During the year 11 Home Helps were employed at 30 cases at a cost of £92 3s. od.

The supply of milk to expectant and nursing mothers and to young children has continued on lines described before. The hard times through which the town is passing have very much increased the work of the Committee in dealing with applications.

At the present time there can be no hard and fast line between cases which should be under Poor Law care, and other cases. A tabular statement of the amounts of milk and the various kinds of dried milk sold or supplied free is appended.

		Cows Milk.	Dried Milk.	Lactogol.	Virol.	Ovaltine.
Foods Sold ...	£	Nil.	1359 18 5	9 7 6	138 7 0	58 12 2
Foods Supplied Free ...	£	665 0 5	224 8 10	Nil.	3 19 0	Nil.
	£	665 0 5	1584 7 3	9 7 6	142 6 0	58 12 2

	1921.	1920.
	£ s. d.	£
Value of Foods Sold .....	1566 5 1	1714
Value of Foods Supplied Free...	893 8 3	406
	<u>£2,459 13 4</u>	<u>£2,120</u>

## WORK OF THE INFANT WELFARE VOLUNTARY WORKERS ASSOCIATION

The admirable work of the Association has been carried out on lines similar to those detailed in last year's Report. The work at the Snow Hill Centre is progressing rapidly; 145 children making 787 attendances were treated by Dr. Murdock at the Centre for minor ailments of children under 5 years of age. These are cases which without the activities of the Centre would probably fail to receive treatment.

Great care is taken to avoid overlapping and many applicants are referred to private Medical Practitioners, the Preston Royal Infirmary, or the Poor Law Guardians.

The records of the Massage department are satisfactory; 34 children suffering from various forms of wasting, paralysis, and deformities made 892 attendances.

A notable extension of the work was made in April, 1922, when a Dental department was opened for the treatment of young children and their mothers. The scheme has received the approval of the Health Committee and the Ministry of Health, and as a special mark of its Public Health utility in these times has been allowed by the latter to rank as a Grant-earning Service.

Among its other multifarious work the Association undertook the organisation of Baby Week in the third week in September. The crowded attendance at the Public Hall shewed the great interest aroused by the undertaking. The details of the work are shown in the Report of the Association for the year 1921-22.

## PRESTON &amp; DISTRICT HOME FOR HOMELESS INFANTS.

This voluntary organisation which is maintained by public subscriptions and grants by the Preston Corporation, the Ministry of Health, and the Lancashire County Council, admitted 15 infants during the year; 12 were discharged, and the average duration of stay was 28 weeks. Most of the children were adopted. There were no deaths and no cases of infectious disease.

TABLE Vc.  
WORK OF HEALTH VISITORS.

						District <b>A</b>	District <b>B</b>	District <b>C</b>	District <b>D</b>	District <b>E</b>
<b>Births.</b>										
1st Visit ...	...	...	...	...	...	561	603	539	391	428
Re-visits ...	...	...	...	...	...	2039	1911	736	1086	1205
Still-Births	...	...	...	...	...	18	25	12	12	19
<b>Ophthalmia Neonatorum.</b>										
1st Visit ...	...	...	...	...	...	2	1	2	4	3
Re-visits ...	...	...	...	...	...	7	19	6	51	5
<b>Ante-natal.</b>										
1st Visit ...	...	...	...	...	...	67	215	84	105	122
Re-visits ...	...	...	...	...	...	73	6	16	99	20
<b>Visits to Midwives</b>						...	...	...	2	2
<b>Puerperal Fever.</b>										
1st Visit ...	...	...	...	...	...	4	1	...	...	5
Re-visits ...	...	...	...	...	...	7	4	...	...	...
<b>Measles.</b>										
1st Visit ...	...	...	...	...	...	9	16	9	23	18
Re-visits ...	...	...	...	...	...	4	...	...	3	1
<b>Whooping Cough.</b>										
1st Visit ...	...	...	...	...	...	111	84	59	121	172
Re-visits ...	...	...	...	...	...	23	8	17	13	26
<b>Diarrhoea.</b>										
1st Visit ...	...	...	...	...	...	4	14	18	7	16
Re-visits ...	...	...	...	...	...	3	1	25	10	2
<b>Chicken Pox.</b>										
1st Visit ...	...	...	...	...	...	68	11	11	23	35
Re-visits ...	...	...	...	...	...	8	...	3	...	5
<b>No. of Visits to Children 1—5 years.</b>										
1—2 years	...	...	...	...	...	341	500	312	576	500
2—3 years	...	...	...	...	...	268	326	194	380	403
3—4 years	...	...	...	...	...	228	204	169	292	266
4—5 years	...	...	...	...	...	489	416	389	468	278
<b>No. of Attendances at Infant Welfare Centres.</b>										
Infants ...	...	...	...	...	...	2139	2459	2072	1895	1307
New Cases...	...	...	...	...	...	278	310	187	220	174
Children 1—5	...	...	...	...	...	408	605	636	380	210
Expectant Mothers	...	...	...	...	...	185	254	116	232	122



TABLE V<sub>D</sub>.  
Notification of Births Act.

NOTIFICATIONS RECEIVED FROM						District <b>A</b>	District <b>B</b>	District <b>C</b>	District <b>D</b>	District <b>E</b>	<b>Total</b>
Midwives	...	...	...	...	...	436	450	420	345	368	2019
Doctors	...	...	...	...	...	24	2	10	2	2	40
Parents or Relatives	...	...	...	...	...	110	154	109	50	90	513
Total Notifications Received	...	...	...	...	...	585	622	650	403	464	2724
Total Births Notified	...	...	...	...	...	570	606	639	397	460	2672
Total Births Registered	...	...	...	...	...	589	636	702	426	458	2811
THE BIRTHS WERE ATTENDED BY											
Midwives alone	...	...	...	...	...	299	377	344	225	221	1466
Doctors and Midwives	..	...	...	...	...	132	160	133	60	154	639
Doctors and Monthly Nurses	...	...	...	...	...	70	13	12	8	3	106
Doctors and Unqualified Women	...	...	...	...	...	38	43	31	22	61	195
TOTALS	...	...	...	...	...	539	593	520	315	439	2406

## VI.—Sanitary Administration.

### (1) STAFF.

F. A. SHARPE, M.D.(Lond.), B.S., D.P.H.

Medical Officer of Health, Schools Medical Officer, Port Medical Officer,  
Tuberculosis Officer.

JAMES WALKER, M.B., Ch.B., D.P.H., Vict.

Assistant Medical Officer, Clinical Tuberculosis Officer.

MARY LOWRY, M.B., Ch.B., M.A. (Edin.).

Assistant Medical Officer, Maternity and Child Welfare Officer.

A. PORRITT, M.R.C.V.S., Veterinary Surgeon.

W. H. ROBERTS, F.I.C., Borough Analyst.

Chief Clerk : W. SHARP.

Matron, Isolation Hospital : Miss J. G. BOOTH.

Matron, " Chestnuts " Hospital for Consumption : Miss DOHERTY.

Health Visitors : M. M. BOTTOMLEY, E. A. COOPER, L. ROSS, E. PARK, D.  
LAFFERTY.

Tuberculosis Nurses : J. EDMONDSON, M. COLE.

Sanitary Inspectors : J. MARSDEN, (Food). W. BARON, C.R.S.I. E. CROSS-  
THWAITE, C.R.S.I. H. HOLDEN, C.R.S.I. H. D. WRIGHT, C.R.S.I.  
J. B. MORGAN, C.R.S.I. H. HORNBY, C.R.S.I.

### (2) HOSPITAL ACCOMMODATION.

The Hospital is a modern institution, consisting of an administration block, 4 ward blocks, laundry and other necessary premises.

The ward blocks contain two main wards and two side wards each. The accommodation is for 60 beds.

During the year 426 cases were admitted, nearly twice as many as in 1920. The total is the highest since 1916 (390).

Two newly joined probationers contracted Scarlet Fever—one in January, and one in November—both recovered.

Two nurses contracted Enteric Fever—one on December 1st, 1920, (not previously reported) and one on December 20th, 1921—both recovered,

TABLE VIA.

Disease	In Hospital Dec, 31, 1920	No. Notified	Admitted		Dis- charged	Deaths	Remaining Dec. 31, 1921.
			No.	Per cent of Notified			
Typhoid Fever .....	...	13	8	61	7	...	1
Scarlet Fever .....	13	367	298	82	266	1	44
Diphtheria .....	6	178	120	67	108	6	12
TOTALS .....	19	558	426	77	381	7	57

TABLE VIB.

Length of Stay in Hospital of patients discharged in 1921,  
whether admitted in that year or previously.

Disease admitted for.		Number of cases discharged.	Total days spent in Hospital.	Average length of stay.
SCARLET FEVER ...		267	9038	Days. 33.85
DIPHtheria ...		114	3476	39.49
ENTERIC FEVER ...		87	207	29.57
TOTAL		388	12721	32.79



TABLE VIc.

	Total days spent in Hospital.	Average number of beds occupied daily.
SCARLET FEVER ...	9541	26.14
DIPHTHERIA ...	3516	9.63
ENTERIC FEVER ...	243	0.66
TOTAL ...	13300	36.43

TABLE VI<sub>D</sub>.  
Actual Disease found.

[illegible]

TABLE VIe.

## Scarlet Fever Return Cases.

Case.	No.	Particulars.		Infection after Discharge.
1	E. L.	198	Discharged ..... 21-5-21	34 Days after.
	A. L.	208	„ ..... 12-6-21	12 „ „
	J. L.	218	„ ..... 17-6-21	7 „ „
	A. L.	290	Infected ..... 24-6-21	
2	J. H.	85	Discharged ..... 3-5-21	30 Days.
	E. V.	260	Infected ..... 3-6-21	
3	F. H.	276	Discharged ..... 19-7-21	24 Days.
	G. H.	350	Infected ..... 12-8-21	
4	E. R.	252	Discharged ..... 5-7-21	10 Days.
	F. R.	312	Infected ..... 15-7-21	
5	H. D.	151	Discharged ..... 21-5-21	9 Days.
	G. F.	247	Infected ..... 30-5-21	
6	S. M.	78	Discharged ..... 23-4-21	6 Days.
	I. M.	179	Infected ..... 29-4-21	
7	A. N.	145	Discharged ..... 13-5-21	41 Days.
	J. N.	288	Infected ..... 23-6-21	
8	E. M.	505	Discharged ..... 20-12-21	4 Days.
	J. M.	629	Infected ..... 24-12-21	
9	C. R.	444	Discharged ..... 22-11-21	4 Days.
	H. R.	539	Infected ..... 26-11-21	
10	R. A.	62	Discharged ..... 5-4-21	32 Days.
	H. A.	193	Infected ..... 7-5-21	

Cases coming under the above description are those in which the infection has in all probability been derived from a case which has been discharged from the Hospital within an arbitrarily fixed period of three calendar months. They are ten in number and represent 3.47 per cent. of the original cases. The figure is too high and in the best Hospital practice does not exceed 2—3 per cent.

TABLE VIF.

84

Year.	Cost of Food, Patients & Staff.		Cost of Drugs and Dressings.	Coal and Slack.	Salaries.	Total Expenditure.	Total Cost per Patient based on Total Expenditure.	Average Number of Patients per day.	Average stay in Hospital. DAYS.
	Amount.	Cost per person, per day.							
1912 ...	£ s. d. 679 17 0	s. d. 6¼	£ s. d. 93 13 9	£ s. d. 213 3 10	£ s. d. 476 14 5	£ s. d. 2481 14 9	£ s. d. 5 17 7	48.0	41.9
1913 ...	715 5 0	6¼	91 13 11	238 4 5	489 17 10	2368 5 7	4 10 9	52.4	36.7
1914 ...	788 12 5	6¾	122 4 2	248 2 10	547 1 2	2835 4 4	6 7 5	55.0	45.3
1915 ...	800 13 1	6¾	156 9 3	292 3 4	555 9 10	3083 19 3	6 12 8	54.0	42.0
1916 ...	862 11 6	7¾	181 12 4	326 7 5	584 5 9	3213 13 0	8 4 9	50.0	47.1
1917 ...	617 7 9	10½	130 18 11	576 7 6	552 15 4	2932 5 10	16 13 4	17.0	36.0
1918 ...	436 5 10	10¾	104 14 2	403 3 7	504 2 2	2723 18 4	25 14 0	10.5	36.0
1919 ...	590 19 4	11¼	145 2 1	435 15 6	659 0 7	3164 6 8	15 7 3	17.0	29.9
1920 ...	990 11 11	1 2¾	69 11 4	691 2 8	659 0 7	5046 14 6	23 9 6	21.4	26.4
1921 ...	1285 10 0	1 2¼	131 7 6	848 10 8	1089 3 9	5887 18 0	13 16 5	36.43	32.79



## (3) CHEMICAL AND BACTERIOLOGICAL WORK.

The following is the number of specimens examined during the year :—

Specimens of sputum examined for Tubercle Bacilli .....	494
Throat swabs examined for Diphtheria Bacilli .....	572
Specimens of blood examined for diagnosis of Typhoid Fever (Widal Test) .....	17
Other miscellaneous specimens .....	33
	<hr/>
	1116
	<hr/>

The Chemical Analysis of Water and the analysis of Milk and other foods under the Sale of Food and Drugs Acts, is carried out by Mr. W. H. Roberts, of Liverpool. The examination of Water, Milk and other foods with regard to Bacterial impurity, by the Public Health Laboratory, Manchester.

(4) LOCAL ACTS, SPECIAL LOCAL ORDERS, GENERAL ADOPTIVE ACTS  
IN FORCE IN THE BOROUGH.

Preston Markets Act, 1861.

Preston Improvement Acts, 1869 and 1880.

Preston Corporation Acts, 1900, 1914 and 1921.

Ribble Navigation and Preston Dock Acts, 1883, 1888, 1889, 1890, 1892, 1896 and 1905.

Preston Waterworks Act, 1853 and 1904.

Penwortham Bridge Act, 1912.

The Public Health Acts (Amendment) Act, 1890. Part III.

The Public Health Acts (Amendment) Act, 1907 :—Sections 15, 17, 19, 20, 21, 22, 23, 24, 26, 27, 28, 30, 31 and 33, Part II. (Streets and Buildings).  
Sections 34, 35, 36, 37, 38, 43, 44, 45, 46, 49, 50 and 51 Part III.  
(Sanitary Provision).

Section 53, 54, 56, 57, 59, 60, 62, 63, 64, 65 66 and 68, Part IV. (Infectious Diseases).

Part V. (Common Lodging Houses).

Section 79, 81, 85 and 86, Part VII.

Part VIII.

Section 93 and 95, Part X. (Miscellaneous).

Infectious Diseases Prevention Act, 1890.

The Public Libraries Acts.

The Baths and Washhouses Acts.

## VII.—Housing.

That portion of the work of the Public Health Department relating to the fitness of dwellings has been dealt with in Section II. A summary appears in the appended Schedule :—

There has been an appreciable increase in the number of houses made fit; the condition of the various trades employed, and the lowered cost of materials, contributing to this result.

In the enquiries made by the Staff on Infectious Diseases, Tuberculosis, and Inspections under the Housing Regulations, 1910, attention is directed to the number of rooms per house, and the number of persons occupying them. In the table following the sources of the information were :—

Enquiries re Housing,	1637	...	Total occupants,	6898.
Do. Scarlet Fever,	316	...	do.	1738.
Do. Diphtheria,	166	...	do.	913.
Do. Tuberculosis,	178	...	do.	910.

No. of Rooms per House.	Number of Persons per House.												TOTAL.	
	1	2	3	4	5	6	7	8	9	10	11	12	Houses.	Occupants.
	No. of Families.													
1 Room ...	..	..	..	1	..	..	..	..	..	..	..	..	1	4
2 Rooms ...	8	6	2	4	2	..	..	...	..	..	..	..	22	52
3 Rooms ...	4	13	12	13	11	7	1	1	2	1	...	..	65	258
4 Rooms ...	68	218	273	299	227	152	85	43	23	12	5	2	1407	5911
5 Rooms ...	9	41	72	89	112	66	45	19	20	6	13	2	494	2493
6 Rooms ...	1	15	18	44	52	41	24	17	11	7	5	1	236	1307
7 and over ...	1	4	4	18	11	9	8	4	4	3	2	4*	72	434
Total Families ...	91	297	381	468	415	275	163	84	60	29	25	9	2297	...
Total Persons ...	91	594	1143	1872	2075	1650	1141	672	540	290	275	116	...	10459

\*Includes one eight-roomed house with 20 occupants.

The figures above the heavy lines represent families living under conditions of overcrowding, that is, more than two persons per room.

The preponderance of the four roomed house in the table is due to the fact that this type of house received preference under the Housing Regulation Surveys. By reason of this selection one is unable to say that the table is a fair sample of Housing as a whole. Nevertheless one or two interesting facts emerge. There is no evidence of gross overcrowding, the average number of persons per house being 4.55, as compared with 4.49 at the 1911 Census; 65 houses (a fraction under 3 per cent.) were overcrowded. The occupants of these overcrowded houses numbered 648 or 6.19 per cent. of the whole; the corresponding figure at the 1911 Census was 5.6.

Taking the different sized tenements individually, and comparing these with the corresponding figures eleven years ago we have :

Average number of occupants per room in tenements of various sizes.

	2 Rooms	3 Rooms	4 Rooms	5 Rooms	6 Rooms
Preston: 1911 Census...	1.11	1.21	1.01	0.98	0.88
1922 Enquiries...	1.18	1.32	1.05	1.01	0.92

The Census for 1921 gives the population of the Borough as 117,426, an increase of 313 since 1911. The Registrar-General estimates the population in 1921 to be 119,900, an increase of 2,474. The natural increase, that is, the excess of births over deaths, was 5,319. From January, 1911, to December, 1914, 596 houses were built; between January, 1915, and December, 1918, 161; between January, 1919, and December, 1920, 14, and between January, 1921, and December, 1921, 234, of which 226 were built by the Council and eight by private enterprise. The total since 1911 being 1,005.

It seems that the intercensal increase of population has been adequately catered for and that overcrowding estimated by Dr. Pilkington in 1919 to affect 8 per cent. of the population has been reduced and now affects probably not more than 6 per cent., i.e., about 7,000 persons.

It should be borne in mind that the Council are still unable to deal with houses which are unfit for habitation and with areas which ought to be re-constructed. Further, that although the estimated intercensal increase is only 2,474, yet the natural increase was 5,319, that is to say nearly 3,000 persons have left the Borough, many of them from difficulty in obtaining suitable housing.



We shall probably reach last year's building figure in 1922, but what will be done when the remainder of the Council's programme is completed is difficult to say.

No. of Houses built each year 1911 to 1921.

Year.						No.
1911	...	...	...	...	...	193
1912	...	...	...	...	...	143
1913	...	...	...	...	...	142
1914	...	...	...	...	...	118
1915	...	...	...	...	...	95
1916	...	...	...	...	...	45
1917	...	...	...	...	...	19
1918	...	...	...	...	...	2
1919	...	...	...	...	...	1
1920	...	...	...	...	...	13
1921	...	...	...	...	...	8 + 226 by the Council.
Total ... ..						1005

### HOUSING SCHEDULE.

Number of new houses erected during the year :—

(a) Total	...	...	...	...	...	...	234
(b) As part of a municipal housing scheme	...	...	...	...	...	...	226

#### 1.—INSPECTION.

Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ..	7,500
Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	1,647
Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	6
Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ... ..	6,723

## 2.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers ...	5,094
---	-------

## 3.—ACTION UNDER STATUTORY POWERS.

## (a). Proceedings under section 28 of the Housing, Town Planning, &amp;c., Act, 1919.

Number of dwelling-houses in respect of which notices were served requiring repairs ...	30
---	----

Number of dwelling-houses which were rendered fit—	
--	--

(a) by owners ...	Nil.
-------------------	------

(b) by Local Authority in default of owners ...	5
---	---

Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ...	*Nil.
--	-------

## (b). Proceedings under Public Health Acts.

Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ...	193
--	-----

Number of dwelling-houses in which defects were remedied—	
---	--

(a) by Owners ...	190
-------------------	-----

(b) by Local Authority in default of owners ...	Nil.
---	------

## (c). Proceedings under sections 17 and 18 of the Housing, Town Planning, &amp;c., Act, 1909.

Number of representations made with a view to the making of Closing Orders ...	4
--	---

Number of dwelling-houses in respect of which Closing Orders were made ...	3
--	---

Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	Nil.
--	------

Number of dwelling-houses in respect of which Demolition Orders were made ...	† Nil.
---	--------

Number of dwelling-houses demolished in pursuance of Demolition Orders ...	Nil.
--	------

\*Owner of six houses declared intention to close. Matter now under consideration of Ministry.

†Carried forward to 1922.





COUNTY BOROUGH OF PRESTON.

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EDUCATION COMMITTEE.

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# ANNUAL REPORT

For the Year ending December 31st, 1921.



# The School Medical Service Report

For the Year 1921.

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## Medical Services Sub-Committee :

ALDERMAN HUBBERSTEY, Chairman.

COUNCILLOR SNELHAM.

THE REV. DEAN E. PYKE.

COUNCILLOR HERBERT.

E. P. BERRY, ESQ.

COUNCILLOR MORRIS.

H. HOWARTH, ESQ.

COUNCILLOR RAMSEY.

MISS HOYLE.

COUNCILLOR MRS. PIMBLETT.

MRS. MEGAHY.

---

## Officers :

Superintendent School Medical Officer : F. A. SHARPE, M.D., B.S., D.P.H.

School Medical Officer : ELIZABETH ROSE, M.B., Ch.B.

Dental Surgeon : E. HUTSON, L.D.S.

---

## School Nurses :

Mary E. Marsden.

Amy Butterfield.

Gertrude Whalley.

May Singleton.

---

## Dental Nurse :

Annie L. Whitehead.

---

## Clerk :

W. A. Kenny.





PUBLIC HEALTH DEPARTMENT,  
TITHEBARN STREET,  
PRESTON,

TO THE MEMBERS OF THE EDUCATION COMMITTEE.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

In presenting the report for 1921, it is hardly necessary for me to say that no fresh ground has been broken. Things being as they are, the School Medical Service has marked time and while extension has been impossible efforts have been made to further co-ordinate our activities with those of the Education and Health Departments.

Among the minor adjustments may be mentioned the inclusion of the examination of the Boys' Grammar School in the scheme as it affects Secondary Schools; the appointment of an additional School Nurse and the adoption of a scheme for the enlargement of the accommodation at the School Clinic.

Two matters referred to in last year's Report, as of immediate importance, were the extension of the Open Air School and the re-organisation of the Dental Department. Neither are likely to be undertaken in the immediate future, but I again stress their importance and trust that no long period of time will elapse before your Committee is able to take the matter up.

Another important extension of the work is in the provision of Educational facilities for the educable Mentally Defective. The idea has received your favourable notice and will, I hope, be formulated into a definite scheme within a few years.

The inauguration of an Orthopaedic Department at the Preston Royal Infirmary is of great importance. There are generally over fifty children of school age who are suffering from crippling defects. With adequate treatment many of these cases could have been either prevented or at least the disastrous end results mitigated.

It is of supreme importance to realise that the most important demand of the School Medical Service is that the children shall be under the best possible hygienic conditions whilst in school. The securing of these conditions means ultimately the expenditure of great sums of money, and whilst impracticable for many years, the necessity remains and should not be lost sight of.

The detailed report prepared by Dr. Rose and Mr. Hutson shews a gradually increasing amount of really useful work in helping to fit the children for their School and after School life.

The work during the year under review has been made easier by your Committee's help and kindness and I should also like to acknowledge the hearty co-operation and help given by the Education Department, Teachers and Staff.

I am,

Your obedient servant,

F. A. SHARPE,  
School Medical Officer.

## 2.—CO-ORDINATION.

The scheme of supervision of child life under the auspices of the Maternity and Child Welfare Committee includes the visiting of children up to the age of five years. The records thus obtained are transferred from the Public Health Department to the School Medical Service. Thus, during the past year a medical and social history of all children born in 1916 who entered upon school life during 1921 was furnished to the Inspecting Medical Officer and the important details transferred to the School Medical Card.

## 3.—SCHOOL HYGIENE.

The accommodation available and the average attendance for the year 1921 is as follows :—

	Number of Schools.	Recognised Accommodation.	Average attendance for year ended 31st March, 1921.
Church of England .....	20	13396	7065
Roman Catholic .....	9	9984	5742
Nonconformist .....	7	3178	2369
Council .....	3	1938	1478
Total .....	39	28496	16654

The average attendance is 79 less than that of 1920.

The difficulties imposed upon the Committee by reason of the architectural style and site of the larger number of the non-provided schools were referred to in last year's report. During the year alterations and repairs have been carried out at the following schools :—

### MIDSUMMER.

Christ Church, Bow Lane, St. Matthew's Boys and Infants, English Martyrs' Elementary, St. James' Mixed, Parish Church, St. Luke's Boys and Girls, Talbot Boys and Girls, St. Andrew's Boys, Hincksman Memorial (Classrooms only), Park Secondary (Part), Grammar School (Part).



## CHRISTMAS.

All Saints', St. Saviour's, St. James' Infants,

102 visits have been paid to the various schools by the District Sanitary Inspectors.

### 4.—MEDICAL INSPECTION.

The system in vogue, which was fully described in the report for 1920, has not been altered. The number of Routine Medical Inspections was 5,245, as against 6,274 in the previous year. There were 498 fewer aged 5, 91 fewer aged 6, 29 fewer aged 8 and 9, 461 fewer aged 12, and 50 more aged 13. The smaller number of infants examined may be partly explained by the fact that the average births in the years 1911-1914 numbered about 2,800, and that in 1915 there was a drop in numbers of nearly 300, followed in 1916 by a further drop of 231, and in 1917 of 296. The lowest level, 1,906 births was reached in 1918, followed by an increase to 2,086 in 1919 and 2,184 in 1920; owing to unavoidable circumstances the examination of children aged 12 was in some schools postponed to 1922 (Roebuck Street and English Martyrs').

It is of interest to note that the total cost of the School Medical Service was £3,560. The burden on the rates being reduced by a grant from the Board of Education to £1,780. Expressed as a proportion of a penny rate the School Medical Service requires the raising of 0.848 pence.

### 5.—FINDINGS OF MEDICAL INSPECTIONS.

#### (a). UNCLEANLINESS.

There is little to complain of with respect to bodily cleanliness on the part of the children inspected, but the condition of the hair leaves a good deal to be desired. The Nurses are most conscientious in the home visiting of cases requiring cleansing, and in most instances are not long in getting even the "excluded" children fit for school. The number of home visits paid in respect of uncleanness :—

1921.	1920.	1919.	1918.	1917.
2622	2446	1732	1150	1145

During the year 22,049 children were examined at School by the Nurses who found that 2,876 or 13.04 per cent. were infected in some degree by vermin. The corresponding figures in 1920 were 20,875, 2,988 and 14.85 per cent.

(b). MINOR AILMENTS.

The nature and extent of such ailments may be best seen from a survey of the work done at the Minor Ailments Treatment Centre, a report of which is given on page xiv. The amount of work done there naturally accounts for the fewer numbers noted during Routine Inspection. See headings Skin, Eye, Table II. page xxvi.

(c). TONSILS AND ADENOIDS.

It is very satisfactory to notice that the number of cases of Enlarged Tonsils and Adenoids referred for treatment has decreased still further this year. The very marked cases are rarely seen, and parents are beginning to understand the dangers which may attend continued mouth-breathing. Also the kindness and care which are given to children treated in the Preston Royal Infirmary, make the idea of operations less alarming than it might otherwise be. The following are the numbers noted :—

1921.	1920.	1919.	1918.	1917.
148	296	323	282	296

(d). TUBERCULOSIS.

As in former years, cases of suspected Tuberculosis have been sent on to the Tuberculosis Officer. As one would expect, severe cases of this disease are not found in schools. The following figures give the numbers of suspected cases dealt with in the Routine Medical Inspections.

1921.	1920.	1919.	1918.	1917.
51	69	74	52	89

The cases referred to the Tuberculosis Officer were classified as follows :—

	Boys.	Girls.	Total.
Suspicious Tuberculosis ... ..	2	4	6
T. B. Glands ... ..	3	2	5
Bronchitis ... ..	8	4	12
Pulmonary Catarrh ... ..	...	1	1
No definite signs of T. B. ... ..	9	8	17
Diagnosis pending ... ..	6	4	10

(e). SKIN DISEASE.

The incidence of skin disease remains much the same as last year. Scabies is not often found in schools and bad cases of Ringworm or Impetigo are rarely seen. Seborrhoea accounts for a certain number of cases but is not as a rule severe.

(f). EXTERNAL EYE DISEASE.

As the more serious type of external eye disease usually keep the children from school, Blepharitis is the most usual form seen at the Clinic. The number referred for treatment during Routine Inspection was only 25 as compared with 62 in the previous year.

(g). VISION.

The Vision is still, unfortunately, not good. A certain proportion of the cases, no doubt, show improvement as time goes on, even with no treatment, but the reverse is also true. During recent years the numbers referred for treatment on account of defects in Vision were :—

1921.	1920.	1919.	1918.	1917.
614	627	615	810	616

The percentages of the defects of Vision occurring at the different schools is not given, as the numbers examined are too small for percentage treatment. It is of interest however to note that among 5,245 children examined 479 were referred for treatment on account of Defective Vision, a percentage of 9.1. The children age 5 and 6 are not examined for Vision as generally speaking they do not know their letters, so that the figures for percentage purposes should be 3,743 and 477, giving a percentage of 12.7. The figures for the various age groups are as follows :—

			Number examined.		Referred for Treatment.		Percentage Defective.
8—9	Boys	.....	993	...	126	...	12.8
	Girls	.....	952	...	146	...	15.35
12 years.	Boys	.....	796	...	88	...	11.0
	Girls	.....	804	...	100	...	12.4
13 years.	Boys	.....	127	...	11	...	8.6
	Girls	.....	71	...	6	...	8.4



A consideration of the above table shows that girls are affected with Defective Vision to a greater extent than boys, that the percentage of defect is higher at the earlier ages and that the difference between the sexes diminishes on the approach of school leaving age.

#### (h). EAR DISEASE AND HEARING.

The numbers of cases of Ear Disease referred for treatment show a great decrease but this is not as encouraging as one might think, as there are still many cases attending the Clinic. An endeavour is made to remedy unhealthy conditions of the throat, and this may in time reduce the number of cases of Ear Disease. The numbers referred for treatment during Routine Inspection are as follows :—

1921.	1920.	1919.	1918.	1917.
34	66	50	62	52

#### (i). DENTAL.

The general impression made by the Routine Inspections is that the improvement in the state of the children's teeth is being maintained. The arrangements for Dental Inspection were fully described in the report for 1920. The increase in the work can be seen by a reference to the table on page xviii.

It appears that although the principal Medical Officer to the Board of Education has given his approval of the appointment of unqualified Dental Dressers as suggested to the Committee in December, 1920, the newly organised Dental Profession is likely to view such appointments with hostility. There is no doubt that an increase of our Dental work offers a very fine field of remedial work.

Twelve years old molars were found to be decayed as soon as erupted and I think that this is accounted for by poor calcification owing to war food and that it should improve with better conditions of life. Further, septic conditions of the teeth and gums have been scarcer and have yielded to treatment, this being due to the greater number of children using the tooth brush. A point is made of impressing the importance of cleanliness of the mouth on the children. The number of refusals has been low and there have been no difficulties experienced in handling the children.

## (j). CRIPPLING DEFECTS.

As formerly, the number of children found to be seriously disabled is small. Most of these children are in good health and attend school well. The main causes of the crippling defects are Infantile Paralysis, Rickets, Tubercular Disease and Congenital troubles. Comparing various years the numbers are as follows :—

1921.	1920.	1919.	1918.	1917.
65	54	46	42	36

Number of children who are given treatment in the Massage and Electrical Department of the Preston Royal Infirmary :—

Massage and Electricity ...	...	...	4
Massage and Farradism ...	...	...	2
Massage ...	...	...	26

## 6.—INFECTIOUS DISEASE.

The district has been singularly free from Infectious Disease in epidemic form, both notifiable and non-notifiable, for some years past. Under the system in operation in the Borough it is the duty of the Head Teacher to report the occurrence of and the suspected occurrence of Infectious Discases among the scholars to the Director of Education. The cases are visited by the staff of the Medical Officer of Health and the results of these visits transmitted through the Director to the Head Teacher. Information as to the period of necessary exclusion and the actual cause of absence in suspected cases is also given. Daily information collected from the records of the Sanitary Inspectors, Health Visitors, Tuberculosis Nurses and School Nurses is prepared and collated with the information in possession of the School Attendance Officers. The following table shows how the different schools were affected. There was a heavy increase in Scarlet Fever, affecting mainly Christ Church, St. Walburge's, St. Mark's Moor Park Wesleyan, English Martyrs' and St. Ignatius'. There were fewer cases of Measles than in the previous year. Whooping Cough showed a heavy increase and affected almost every school in the Borough, particularly St. Saviour's, St. Stephen's, St. Mary's R.C., St. Michael's, St. Andrew's, Roebuck Street, St. Peter's, and St. Ignatius'. Diphtheria was five times as heavy as in 1920. Seventeen schools did not experience a single case, and with the exception of Roebuck Street, 13 cases, the number in the remaining schools could be expressed in single figures. Chicken Pox was twice as prevalent as the last year, St. Andrew's, St. Peter's, and English Martyrs' bearing the brunt.



TABLE A.

SCHOOL.	Typhoid Fever	Scarlet Fever	Measles	Whoop- ing Cough.	Diph- theria.	Chicken Pox.	Mumps.	Ringw'm Eczema, Sore Eyes Heads, &c.
Parish Church .....	...	1	1	...	1	...	...	...
St. James' .....	...	...	1	1	1	1	2	...
St. Augustine's .....	...	6	...	17	...	6	4	1
St. Saviour's .....	...	2	3	38	1	...	10	13
Grimshaw Street .....	...	2	17	...	1	1	...	...
St. Stephen's .....	...	2	2	26	3	2	...	6
Christ Church .....	...	14	1	...	3	...	...	...
Hincksman Memorial .....	...	3	1	7	5	...	...	...
St. Mary's R.C. ....	...	4	1	23	2	2	3	2
St. Wilfrid's .....	...	1	...	1	1	...	...	...
St. Michael's .....	...	6	...	26	3	...	2	3
Sacred Heart .....	...	2	...	5	2	...	...	...
Ashton Wesleyan .....	...	3	...	9	1	...	...	...
St. Andrew's .....	...	5	...	40	2	10	...	5
Roebuck Street Council .....	...	5	...	56	13	4	1	13
St. Walburge's .....	...	23	4	3	4	1	1	...
St. Mark's .....	...	13	...	16	...	4	...	4
St. Peter's .....	...	6	4	23	2	25	...	3
Emmanuel .....	1	7	...	3	8	...	...	...
Plungington Road National ....	...	2	...	1	...	1	...	2
Eldon Street Council .....	...	4	...	3	1	2	3	...
Moor Park Wesleyan .....	...	14	1	6	...	2	2	4
English Martyrs' Elementary ....	...	35	1	8	5	19	4	2
St. Jude's .....	...	2	1	...	2	8	2	1
Deepdale Council .....	...	9	1	1	4	1	3	8
St. Paul's .....	...	2	...	1	1	1	...	...
St. Ignatius' Elementary .....	...	13	3	32	2	5	9	7
All Saints' .....	...	1	...	4	...	1	...	2
Holy Trinity .....	...	...	...	3	...	...	...	1
Orchard U.M.F.C. ....	...	2	...	...	1	...	...	...
St. Luke's .....	...	5	...	6	3	1	1	...
St. Joseph's .....	...	5	1	6	2	2	2	1
St. Matthew's .....	...	8	1	4	6	...	...	1
St. Matthew's Branch .....	...	...	...	2	3	...	...	...
Ribbleton Avenue .....	...	4	1	5	4	2	1	7
St. Mary's National .....	...	10	...	18	4	...	1	...
St. Mary Street Wesleyan .....	1	1	...	...	7	...	...	...
St. Thomas's .....	...	5	...	4	2	...	3	...
Open Air School .....	...	1	...	...	...	...	...	...
	2	228	45	398	100	101	54	86
SECONDARY SCHOOLS.								
Park Secondary School .....	...	6	1	1	2	...	2	...
Catholic Convent .....	...	6	...	...	2	...	...	...
Catholic College .....	...	1	...	...	...	...	...	...
Preston Grammar School .....	4	...	...	...	...	...	...	...



TABLE B.

	0-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10 & Over	Total
Typhoid Fever .....	...	...	...	...	...	1	...	...	...	1
Scarlet Fever .....	...	1	3	12	9	5	2	5	8	45
Measles .....	1	5	19	24	9	4	4	2	3	71
Whooping Cough .....	...	4	7	32	12	8	2	6	2	73
Diphtheria .....	...	2	5	2	4	2	...	...	5	20
Chicken Pox .....	...	6	4	21	6	5	5	1	4	52
Mumps .....	...	...	1	10	11	4	5	3	15	49
Ringworm, Eczema, Sore Eyes, Head, etc. ....	...	2	8	13	25	11	6	2	11	78

## 7.—FOLLOWING UP.

The methods employed in the following up of cases referred for treatment were fully explained in last year's Report and have been very faithfully carried out by the Nurses. The recent years show the following numbers of home visits paid by the Nurses in this connection :—

1921.	1920.	1919.	1918.	1917.
3564	4080	3528	4113	2811

The results may be seen expressed in Tables IV. A. B. C. and D. on pages xxix and xxx.

## 8.—MEDICAL TREATMENT.

During the year, a Medical Inspection Clinic, the aims and objects of which were submitted to the Committee, was established.

The Clinic is held every morning from 9—11. In brief, the function of the Clinic is the medical supervision of all children who are not in a satisfactory state of health. This function operates partly by attempting to ensure that no child shall be absent from

school without adequate medical reasons. Children are sent by Head Teachers, Attendance Officers or brought direct by parents. Information as to School Attendance is sent promptly to the Education Authority and the child referred to the proper remedial agency be it Private medical practitioners or charitable or Public Medical Institution. The period of supervision is determined by the persistence of the malady and in some cases may last the whole of the school life.

The details of the work are as follows :—

#### INSPECTION CLINIC, 1921.

Defect.					New Cases.	Discharged.		Left on the books.
Malnutrition or Debility	...	...	...	...	147	...	132	15
Uncleanliness, Head	...	...	...	...	5	...	5	...
„ Body	...	...	...	...	1	...	1	...
Skin Diseases	...	...	...	...	212	...	200	12
Eye	...	...	...	...	75	...	68	7
Ear	...	...	...	...	55	...	50	5
Nose and Throat	...	...	...	...	80	...	75	5
Enlarged Glands	...	...	...	...	44	...	41	3
Defective Speech	...	...	...	...	2	...	2	...
Teeth	...	...	...	...	16	...	15	1
Heart and Circulation	...	...	...	...	37	...	33	4
Lungs	...	...	...	...	39	...	35	4
Tuberculosis, Definite	...	...	...	...	8	...	1	7
„ Suspected	...	...	...	...	30	...	23	7
Nervous System	...	...	...	...	19	...	15	4
Deformities	...	...	...	...	6	...	6	...
Other Defects	...	...	...	...	183	...	168	15
Totals					959	...	870	89
Total Attendances					...	...	1,287.	

#### (a). MINOR AILMENTS.

For the treatment of Minor Ailments the Clinic in the Miller Arcade is open daily during school hours, and from 9—12 on Saturdays. Most of the work is done during the morning session, the afternoon being reserved more especially for cases of Otorrhoea.

# MINOR AILMENTS TREATMENT CENTRE.

Defect.	Remaining on Books Dec. 31st 1920.	New Cases	Discharged.	Remaining on the Books Dec. 31st 1921
Ringworm, Head and Body ...	4	161	163	2
Scabies .....	9	62	69	2
Impetigo .....	2	476	478	...
Minor Injuries .....	...	21	21	...
Other Skin Diseases .....	30	1319	1347	2
Otorrhoea .....	37	249	285	1
Blepharitis .....	20	308	327	1
Miscellaneous .....	48	201	228	21
Total .....	150	2797	2918	29

Total attendances, 1921 ... .. 35,640.

Total attendances, 1920 ... .. 29,605.

## VISITS RE PHYSICAL DEFECTS, ETC.

	1920.	1921.
Home Visits, following up defectives ... ..	4080	3564
Home Visits, re Cleanliness of Heads ... ..	2446	2622
Children inspected, re Cleanliness of Heads ...	20785	22049
School Visits ... ..	434	385

## (b). TONSILS AND ADENOIDS.

The number of children referred for treatment of these defects during 1921 was 148, out of that number 38 had operative treatment at the Infirmary. 11 were operated on by Private Practitioners and 38 received non-operative treatment, in addition to these, among 223 children who had been referred for treatment in previous years, 210 received operative treatment at the Royal Infirmary and 22 were operated on by Private Practitioners. 12 Cases received non-operative treatment at the hands of the Royal Infirmary and 40 at the hands of general practitioners. Included in the non-operative



class are those which were found on re-inspection to need no further attention. The details are shown in Table IV(c).

### (c). TUBERCULOSIS.

Cases of Tuberculosis are referred to the Tuberculosis Officer. The question of treatment and exclusion from School is decided by him. A reference to the Report of the Tuberculosis Officer will show the amount of work undertaken under this head. 51 Cases in all were referred to Dr. Walker, in none of whom was the disease definitely diagnosed. The Scheme of the Borough Council for the treatment of Tuberculosis includes the provision of 2 Surgical Beds at the Preston Royal Infirmary and 4 Surgical Beds at the Heswall Sanatorium for children. Sanatorium treatment for early Pulmonary cases is provided at the Freshfield Sanatorium and at the Chestnuts Sanatorium at Preston, for advanced cases. In addition, 15 beds for delicate or Pre-Tubercular children are found at the Ormerod Home, St. Annes, and Reynold's Home, Lytham, during the winter months. This work is a continuation of the excellent charitable work carried out by the Police Fund, administered by the Chief Constable, during the summer months. The remaining source of treatment for pre-tubercular children is at the Open Air School, to which a reference is made later in this report.

The children were sent to the Institutions named below :—

							Boys	Girls	Total
Heswall ...	...	...	...	...	...	...	1	1	2
Freshfield	...	..	...	...	...	...	1	17	18
Lytham	...	..	...	...	...	...	10	13	23
St. Annes	...	...	...	...	...	...	14	8	22
Bowden	...	...	...	...	...	...	12	5	17
Eastby	...	...	...	...	...	...	7	...	7

The Secretary of the Preston Royal Infirmary supplies the following particulars relating to the site of disease in tuberculous children admitted from the Borough in 1921 :—

Glands of Neck	...	...	...	...	11
T. B. Hip	...	...	...	...	2
T. B. Spine	...	...	...	...	1
T. B. Peritonitis	...	...	...	...	3
T. B. Knee	...	...	...	...	1
T. B. Foot	...	...	...	...	1
T. B. Abscess	...	...	...	...	1

(d). SKIN DISEASE.

45 Children or 0.89 per cent. were discovered at the Routine Inspections to be suffering from Skin Diseases. The bulk of these were of a mild nature. In addition to these 2,057 children were referred to the Minor Ailments Treatment Centre suffering from these conditions, this represents a percentage on the average number in school attendance of 12.3 per cent. The details of the treatment may be seen on page xv. and in Table IV(A).

(e). EXTERNAL EYE DISEASE.

The children suffering from External Eye Disease have, mainly, received treatment at the Minor Ailments Treatment Centre, any case needing expert advice is sent on to the Royal Infirmary with the usual "Recommend."

(f). VISION.

614 Children examined at the Routine Inspections were referred for treatment, of these 363 received treatment. Including those referred for treatment in previous years and treated during 1921, 837 children were submitted to refraction, 741 to the Infirmary, and 96 to Private Practitioners and Opticians. Of these, 475 were provided with glasses, 12 at the cost of the Education Committee. 124 received other forms of treatment and in 37 cases no treatment was considered necessary.

(g). EAR DISEASES AND HEARING.

56 Children were referred for treatment, in addition 230 children were referred to the Minor Ailments Treatment Centre by Head Teachers and Attendance Officers. 249 received treatment at the Clinic and 36 at the Preston Royal Infirmary, in 34 cases treatment was received both at the Clinic and Preston Royal Infirmary.

(h). DENTAL DEFECTS.

I have again to report a large increase in the work of the Dental Department. 159 more children attended the Department than in 1920, and 205 more attendances were made. There were 298 more extractions, 736 more stoppings and 1,250 fewer dressings than in the previous year. The details are seen in the accompanying table and in Table IV(D). on page xxx. An extension of the Dental Clinic is probably the most useful improvement that could be made to the School Medical Service.

# ANNUAL REPORT OF THE SCHOOLS' DENTAL OFFICER.

For the Period January 1st to December 31st, 1921.

SCHOOLS VISITED	Number of Children Examined at School	No. of Treatm't Required	Number requiring Treat-ment.	Number accepted Treat-ment.	Number refused Treat-ment.	No Informa-tion available	Own Dentist.	Particulars of Attendances and Work at Dental Clinic.					
								Number attended Clinic	No. of Actual Attend-ances at Clinic	No. of Teeth Extracted	No. of Stoppings	No. of Dressings	No. of Scalings
Talbot R.C. ....	...	...	...	...	...	...	...	...	40	...	33	21	...
St. Peter's C.E. ....	9	4	5	5	...	...	...	69	251	4	291	211	2
Christ Church C.E. ....	282	124	158	123	5	...	30	67	295	2	389	184	1
Open Air Council .....	187	85	102	90	1	...	11	49	186	39	222	90	1
St. Stephen's C.E. ....	157	65	92	53	2	...	37	50	160	...	184	120	...
St. Mark's C.E. ....	154	81	73	57	2	...	14	50	193	2	226	152	...
Deepdale Council .....	367	193	174	119	...	...	55	120	382	...	501	188	4
Hinckman Memorial .....	170	73	97	87	4	...	6	88	285	...	341	125	2
St. Michael's C.E. ....	126	52	74	55	5	...	14	43	172	1	219	85	...
Sacred Heart R.C. ....	121	48	73	54	5	...	14	47	182	1	261	133	...
Ashton Wesleyan .....	142	59	83	71	4	...	8	62	200	...	247	91	1
St. Andrew's C.E. ....	258	122	136	80	5	...	51	79	298	...	418	190	...
St. Jude's C.E. ....	89	53	36	27	4	...	5	29	99	...	108	66	...
St. Cuthbert's C.E. ....	46	33	13	8	...	...	5	6	15	...	21	24	...
St. Mary's C.E. ....	85	26	59	45	5	...	9	38	82	...	103	40	2
Casuals examined at Dental Clinic .....	725	29	696	696	...	...	...	696	920	682	219	189	2
TOTALS ... 1921	2918	1047	1871	1570	42	...	259	1493	3760	731	3783	1909	15
do. ... 1920	2597	1066	1531	1365	31	23	112	1334	3515	433	3047	3159	8
do. ... 1919	1939	870	1069	986	26	23	34	1052	2442	497	1976	2238	4
do. ... 1918	2657	171	1486	1278	102	52	54	1287	1976	437	2035	1650	12
do. ... 1917	2354	353	1470	1268	103	27	72	1116	2044	683	1301	1762	43
do. ... 1916	2689	1428	1340	1234	46	10	56	1220	2388	771	2084	2480	105



## 9.—OPEN AIR EDUCATION.

### (a). PLAYGROUND CLASSES.

There are no organised Playground Classes in this area.

### (b). OPEN AIR SCHOOL.

One cannot over estimate the good done to the health of the children who attend the Open Air School on Moor Park. Most of the children develop good healthy appetites and rest well during the time set apart for sleep. They are given warm baths twice a week and those who are considered strong enough much enjoy being taken to the Open Air Swimming Bath, which is situated near the School. Each week the School is visited by the School Medical Inspector and a Nurse, the children being examined in rotation.

The waiting list is such that another School run on the same lines would be welcome, but owing to lack of funds, this does not seem possible at present.

Thanks are again due to the Staff for their exceptional care of the children.

The number of those who attended during 1921 :—

	Boys.	Girls.	Total.
On the Books 1st January, 1921 .....	34	43	77
Admitted .....	21	21	42
Discharged .....	19	12	31
Remaining on Books 31st December, 1921	36	52	88

Average daily attendance during the year was 73.27.

#### The Age and Sex of those admitted.

Age	...	...	...	...	6	7	8	9	10	11	12	13	14	Totals
Boys	...	...	...	...	1	2	3	4	1	4	3	2	1	21
Girls	...	...	...	...	2	2	4	1	1	6	4	1	...	21
Discharged—														
Boys	...	...	...	...				3	6	5	1	2	2	19
Girls	...	...	...	...				2	2	2	2	2	2	12

The average length of stay at the School of those discharged in 1921, was, inclusive of holidays, 58 weeks.

## 10.—PHYSICAL TRAINING.

There is no Physical Training Instructor for the Elementary Schools, the work having been carried on by teachers.

## 11.—PROVISION OF MEALS.

As will be seen from the numerical table the number of children supplied with free meals has increased very much. This is, of course, easily explained by the serious amount of unemployment amongst the parents. Only one meal a day is given and care is taken that it should be wholesome and nourishing. The following figures show the number of meals supplied and the average number of children who attended each of the four centres.

Centre					Number of meals supplied	Average number of children attending weekly	
Marsh Lane	...	...	...	...	23084	...	101
Glover's Court	...	...	...	...	30307	...	137
Maitland Street	...	...	...	...	19484	...	88
Roebuck Street	...	...	...	...	7610	...	34
					<hr/>		<hr/>
1921 Totals	...	...	...	...	80485	...	360
1920 Totals	...	...	...	...	34693	...	171

## 12.—SCHOOL BATHS.

The number of children who received swimming lessons, either at the Open Air Bath in Moor Park or Saul Street Baths was 1,370, 952 boys and 418 girls.

## 13.—CO-OPERATION OF PARENTS.

That there is a very real desire on the part of many of the parents to keep their children in good health, may be seen by the numbers who attend the Inspection Clinic each morning. There will always be a certain proportion of careless parents, but on the other hand, there are many more who on being told of a defect, are only too anxious to have it attended to.

#### 14.—CO-OPERATION OF TEACHERS.

Thanks are again due to the teachers for the help and information which they are ever ready to put at the disposal of the Nurses or Medical Inspector. To the teachers is due the regular attendance at Clinics and Infirmary. They are also most attentive in giving effect to any instructions which may be given in connection with children needing special supervision.

#### 15.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

There are few who work more heartily for the welfare of the children than do the School Attendance Officers, knowing the children and their home conditions, as they do, they are able to bring under notice any who they think are in need of help. The investigation of cases requiring free clogs or spectacles is undertaken by them, and amongst many other duties, they keep a record of all children of school age who are specially defective and are in Homes or Institutions.

#### 17.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(a). Care is taken to keep the list of these children as up-to-date as possible. New cases are given special examination and all old cases are kept under supervision.

Twenty-five children were examined on account of Mental Deficiency, the necessary certificates being sent to the Director of Education.

(b).

Blind (including partially Blind) attending Certified Schools .....	Blind Asylum, Liverpool .....	3 Boys.
	Blind Home, Fulwood .....	2 Boys.
	Do. do. ....	1 Girl.
Deaf and Dumb attending Certified Schools .....	Royal Cross School, Preston ...	5 Boys.
	Do. do. ...	3 Girls.
	Boston Spa .....	1 Boy.
	Do. ....	1 Girl.
Mentally Defectives attending Certified Schools .....	Allerton Priory .....	1 Girl.
	Pontville .....	2 Boys.



## 19.—SECONDARY SCHOOLS.

### PARK SCHOOL.

The Medical Inspection of the pupils attending the Park School for Girls was continued on the lines begun at the end of the previous year. Winckley Square School, where the examinations took place, was visited each week and all the Girls—432 in number—were examined. The general health of the girls during the year was excellent and considering that defects, however small, were taken note of, the statistical return is most gratifying.

Miss Stoneman again saw to the work of following up and reported that all defects (Medical or Dental) for which treatment was advised, had been duly attended to.

Thanks are due to Miss Warne and Miss Bass for their assistance during Inspections and for their kindness in preparing a report, a summary of which is given below. The table shows the percentage of those with defects in each age group, from 10 to 18 years of age.

Number examined.	Age.	No Defect.	1 Defect.	2 Defects.	3 Defects.	4 Defects.
28	10	43%	50%	3.5%	3.5%	...
41	11	29%	61%	10%	...	...
51	12	45%	33%	20%	2%	...
81	13	41%	44%	11%	4%	...
85	14	35%	39%	26%	...	...
66	15	27%	53%	15%	5%	...
45	16	40%	33%	20%	7%	...
31	17	52%	42%	3%	3%	...
4	18	75%	25%	...	...	...

# Return of Defects found in the course of Medical Inspection in 1921.

Defect or Disease.	Number recommended for Treatment.	Number kept under observation.
Heart and Circulation .....	19	4
Lungs (Bronchitis, etc.) .....	2	1
Skin Affections .....	1	...
Ear Affections .....	14	...
Dental Defects .....	215	1
Defective Vision .....	30	...
Tonsils and Adenoids .....	8	3
Other Defects and Diseases .....	45	15

## PRESTON GRAMMAR SCHOOL.

Dr. Walker reports that he has examined 360 boys. A summary of his findings is appended.

Number Examined.	Age.	No Defect.	1 Defect.	2 Defects.	3 Defects.	4 Defects.
5	8	40%	40%	20%	...	...
13	9	30.7%	53.9%	7.7%	7.7%	...
25	10	64%	32%	4%	...	...
61	11	77%	19.8%	1.6%	1.6%	...
78	12	60.2%	35.9%	2.6%	1.3%	...
75	13	67%	29%	4%	...	...
44	14	66%	32%	2%	...	...
48	15	54%	40%	6%	...	...
5	16	60%	40%	...	...	...
4	17	75%	25%	...	...	...
2	18	50%	50%	...	...	...

## Return of Defects found in the course of Medical Inspection in 1921.

Defect or Disease.	Number recommended for Treatment.	Number kept under observation.
Heart and Circulation .....	2	10
Lungs (Bronchitis, etc.) .....	4	6
Skin Affections .....	2	1
Ear Affections .....	4	1
Dental Defects .....	66	1
Defective Vision .....	41	...
Tonsils and Adenoids .....	5	2
Other Defects and Diseases .....	5	6

### 21.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

There were 340 children examined for Juvenile Employment. By far the largest number of these were to be engaged in the Delivery of Milk or Newspapers. Most of the children were strong and fit for the work, only a very few being marked as fit for very light work only.

### 23.—MISCELLANEOUS.

(a). The Scholarship candidates who were medically examined numbered 29, 22 girls and 7 boys. All those with defects had the necessary attention from their own doctors.

#### TREATMENT OF UNCLEANLINESS.

(a). The average number of visits per annum made by the School Nurses to each School ... ..	3
(b). The total number of Examinations made of Children by School Nurses in the year in the Schools ... ..	22049
(c). The number of individual children found unclean ... ..	2876



24.—STATISTICAL TABLES.

TABLE I.—Number of Children inspected 1st January to 31st December, 1921.

A.—Routine Medical Inspection.

Age.	Entrants.					Total.
	3	4	5	6	Other Ages.	
Boys .....	...	...	642	168	...	810
Girls .....	...	...	515	177	...	692
Totals .....	...	...	1157	345	...	1502

Age.	Interme- diate Group		Leavers.					Grand Total
			12	13	14	Other Ages.	Total.	
	8	9						
Boys .....	817	176	796	127	...	...	1916	2726
Girls .....	809	143	804	71	...	...	1827	2519
Totals.....	1626	319	1600	198	...	...	3743	5245

	Special Cases.	Re-examinations ( <i>i.e.</i> , Number of Children Re-examined),
Boys.....	72	195
Girls .....	70	218
Totals .....	142	413

No. of Individual Children inspected ... 5,387.

TABLE II.—Return of Defects found in the course of Medical Inspection in 1921.

DEFECT OR DISEASE.	CODE GROUPS.			SPECIALS.	
	Number referred for Treatment. 2	Number requiring to be kept under observation but not referred for Treatment. 3	Number referred for Treatment 4	Number requiring to be kept under observation but not referred for Treatment. 5	
Malnutrition .....	...	...	...	...	
Uncleanliness Head .....	...	...	...	...	
"    Body .....	...	...	...	...	
Skin	{ Ringworm, Head .....	3	...	...	
	"    Body .....	2	...	...	
	{ Scabies .....	8	...	...	
	{ Impetigo .....	2	...	...	
	{ Other Diseases(non-tubercular)	30	1	3	
Eye	{ Blepharitis .....	25	...	...	
	Conjunctivitis .....	1	...	...	
	{ Keratitis .....	...	...	...	
	{ Corneal Ulcer .....	...	...	...	
	{ Corneal Opacities .....	...	...	...	
	{ Defective Vision .....	468	21	59	
	{ Squint .....	46	2	12	
	{ Other Conditions .....	29	...	...	
Ear	{ Defective Hearing .....	20	...	...	
	{ Otitis Media .....	32	1	2	
	{ Other Ear Diseases .....	...	...	...	
Nose and Throat	{ Enlarged Tonsils .....	106	14	19	
	Adenoids .....	13	...	3	
	{ Enlarged Tonsils and Adenoids	1	...	...	
	{ Other Conditions .....	5	...	1	

Defective Speech .....	37	1	1	...
Teeth :—Dental Diseases .....	...	...	...	...
Heart and Circulation { Heart Disease :— Organic ..... Functional ..... Anaemia .....	57 1 121	20 1 ...	3 1 10	... ... ...
Lungs { Bronchitis ..... Other non-tubercular Diseases	54 5	8 3	2 1	... ...
Tuberculosis { Pulmonary :— Definite ..... Suspected ..... Non-Pulmonary :— Glands ..... Spine ..... Hip ..... Other Bones and Joints.. Skin ..... Other Forms .....	... 32 ... ... ... ... ... ... ...	... 2 ... ... ... ... ... ... ...	... 19 1 ... ... ... ... ... ...	... ... ... ... ... ... ... ...
Nervous System { Epilepsy ..... Chorea ..... Other Conditions .....	... ... 1	... ... ...	... ... ...	... ... ...
Deformities { Rickets ..... Spinal Curvature ..... Other Forms .....	3 ... 3	... ... ...	... ... ...	... ... ...
Other Defects and Diseases .....	55	6	13	...
Number of Individual Children having Defects which required Treatment or to be kept under observation .....	...	...	...	1228



TABLE III.—Numerical Return of all Exceptional Children in the Area in 1921.

			Boys.	Girls.	Total.	
Blind (including partially blind), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools .... Attending Certified Schools for the Blind. Not at School .....	1 5 ...	2 1 6	3 6 6	
Deaf and Dumb (including partially deaf), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools .... Attending Certified Schools for the Deaf.. Not at School .....	1 6 ...	1 4 ...	2 10 ...	
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools .... Attending Certified Schools for Mentally Defective Children .....	8 4	5 1	13 5	
		Notified to the Local Control Authority by Local Education Authority during the year .....	...	1	1	
		Not at School .....	5	...	5	
	Imbeciles.	At School .....	1	3	4	
		Not at School .....	3	3	6	
	Idiots.	At School .....	2	2	4	
	Not at School .....	2	3	5		
Epileptics.		Attending Public Elementary Schools .... Attending Certified Schools for Epileptics In Institutions other than Certified Schools Not at School .....	9 ... 1 4	3 ... 1 3	12 ... 2 7	
Physically Defective.	Pulmonary Tuber- culosis.	Attending Public Elementary Schools .... Attending Certified Schools for Physically Defective Children .....	21 ...	29 ...	50 ...	
		In Institutions other than Certified Schools Not at School .....	.. 17	... 21	... 38	
		Crippling due to Tuber- culosis.	Attending Public Elementary Schools .... Attending Certified Schools for Physically Defective Children .....	9 ...	5 ...	14 ...
			In Institutions other than Certified Schools Not at School .....	1 2	... 3	1 5
	Crippling due to causes other than Tuberculosis <i>i.e.</i> Paralysis, Rickets, Traumatism		Attending Public Elementary Schools .... Attending Certified Schools for Physically Defective Children .....	30 ...	21 ...	51 ...
			In Institutions other than Certified Schools Not at School .....	.. 2	... 1	... 3
		Other Physical Defectives, <i>e.g.</i> , delicate and other children suitable for admission to Open-Air Schools; children suffering from severe Heart Disease.	Attending Public Elementary Schools .... Attending Open-Air School .....	19 55	23 64	42 119
			Attending Certified Schools for Physically Defective Children, other than Open- Air Schools .....	...	...	...
	Not at School .....		23	21	44	
	Dull or Backward*		Retarded 2 years .....	32	34	66
		Retarded 3 years .....	19	20	39	

\*Judged according to age and standard.

TABLE IV.—Treatment of Defects of Children during 1921.

## A.—Treatment of Minor Ailments

Disease or Defect.	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme.	Otherwise.	Total.
Skin—				
Ringworm, head .....	165	161	2	163
Ringworm, body .....				
Scabies .....	71	62	7	69
Impetigo .....	478	476	2	478
Minor Injuries .....	21	21	...	21
Other Skin Disease .....	1349	1319	28	1347
Ear Disease .....	286	249	36	285
Eye Disease (external and other).	328	308	19	327
Miscellaneous .....	249	201	27	228

## B.—Treatment of Visual Defect.

Number of Children.									
Referred for Refraction	Submitted to Refraction.				For whom Glasses were Prescribed	For whom Glasses were Provided	Recommended for Treatment for other than by Glasses	Received other forms of Treatment	For whom no Treatment was considered necessary
	Under Local Edu- cation Authority's Scheme, Clinic or Hospital	By Private Practitioner or Hospital	Other- wise	Total					
837	741	66	30	837	676	475	124	124	37

## C.—Treatment of Defects of Nose and Throat.

Number of Children.					
Referred for Treatment.	Received Operative Treatment.			Received other forms of Treatment.	
	Under Local Education Authority's Scheme, Clinic or Hospital.	By Private Practitioner.	Total.	Authority's Scheme	Private Practition- ers
392	248	33	281	50	40

# D.—Treatment of Dental Defects.

## 1.—Number of Children dealt with.

		Age Groups.													
		5		6 & 7		8 & 9		10 & 11		12 & 13		14		TOTAL.	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(a). Inspected by Dentist .....	Routine	...	...	444	430	204	145	324	307	180	159	...	...	1152	1041
	Special	...	...	76	62	98	105	101	128	78	77	...	...	353	372
(b). Referred for treatment .....	Routine	...	...	128	166	107	88	215	221	125	125	...	...	575	600
	Special	...	...	70	60	96	98	98	124	78	72	...	...	342	354
(c). Actually treated .....	Routine	...	...	104	102	61	52	168	153	78	79	...	...	411	386
	Special	...	...	70	60	96	98	98	124	78	72	...	...	342	354

## 2.—Particulars of Time given and of Operations undertaken.

	No. of Half-days devoted to Inspection.	Total number of attendances made by the Children at the Clinic.	No. of Half-days devoted to Treatment.	No. of Permanent Teeth		No. of Temporary Teeth		Total number of Filings.	No. of Administrations of General Anaesthetics included in 4 and 6.	No. of other Operations.	
				Extracted	Filled	Extracted	Filled			Permanent Teeth.	Temporary Teeth.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Routine ...	} 24	2840	} 432	32	3564	17	...	3564	...	987	746
Special ...		920		218	219	464	...	219	...	103	88



TABLE V.—Summary of Treatment of Defects as shown in Table IV. (A, B, C and D).

Disease or Defect.	Number of Children.			
	Referred for Treatment.	Treated.		
		Under Local Education Authority's Scheme	Otherwise.	Total.
Minor Ailments .....	2947	2797	121	2918
Visual Defects .....	837	503	96	599
Defects of Nose and Throat .....	392	298	94	392
Dental Defects .....	1871	1493	259	1752
Other Defects .....	498	45	311	356
Total ...	6358	4901	929	5830

TABLE VI.—Summary relating to Children Medically Inspected at the Routine Inspections during the year 1921.

(1). The total number of children medically inspected at the routine Inspections* ... ..	5245
(2). The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or footgear) who require to be kept under observation (but not referred for treatment) ...	273
(3). The number of children in (1) suffering from :—	
Malnutrition ... ..	...
Skin Disease ... ..	46
Defective Vision (including Squint) ... ..	566
Eye Disease ... ..	26
Defective Hearing ... ..	20
Ear Disease ... ..	33
Nose and Throat Disease ... ..	139
Enlarged Cervical Glands (non-tubercular) ... ..	38
Defective Speech ... ..	...
Dental Disease ... ..	...
Heart Disease :—	
Organic ... ..	77
Functional ... ..	2
Anaemia ... ..	121
Lung Disease (non-tubercular) ... ..	70
Tuberculosis :—	
Pulmonary—Definite... ..	...
„ Suspected ... ..	34
Non-Pulmonary ... ..	...
Disease of the Nervous System... ..	1
Deformities ... ..	6
Other Defects and Diseases ... ..	61
(4). The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, etc.) ... ..	1061
(5). The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, etc.) ... ..	697

\*“ Specials ” not included in this Table.





